



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 123592

TO: Gerald G Leffers
Location: REM/2A69/2C70
Art Unit: 1636
Thursday, June 03, 2004

Case Serial Number: 09/769699

From: Alex Waclawiw
Location: Biotech-Chem Library
Rem 1A71
Phone: 272-2534

Alexandra.waclawiw@uspto.gov

Search Notes

STIC-Biotech/ChemLib

123592

DATE

From: Leffers, Gerald
Sent: Wednesday, June 02, 2004 2:59 PM
To: STIC-Biotech/ChemLib; Yucel, Irem
Subject: RE: 09/769,699

Can anyone give me a status update for this search? This is an After-Final case that has a fairly tight deadline on it. It would be very useful to be able to allow the claims if they are in fact free of any of the more recently issued patents and/or pending applications. Thank you for your help. Gerry Leffers

Gerald G. Leffers Jr., PhD
Primary Examiner, Art Unit 1636
Remsen Building, Room 02A69
(571) 272-0772

-----Original Message-----

From: Fredman, Jeffrey
Sent: Thursday, May 20, 2004 9:39 AM
To: STIC-Biotech/ChemLib
Cc: Leffers, Gerald
Subject: FW: 09/769,699

seq 2-120377A

PLEASE RUSH.

I Approve.

Jeff Fredman

-----Original Message-----

From: Leffers, Gerald
Sent: Thursday, May 20, 2004 8:01 AM
To: Fredman, Jeffrey
Subject: 09/769,699

Hi Jeff, please approve a RUSH updated search of issued and pending files for SEQ ID NO: 2 of this application (~1,200 amino acid residues). This is an After-Final that may well be allowable. As always, thank you for your help. Gerry

Gerald G. Leffers Jr., PhD
Primary Examiner, Art Unit 1636
Remsen Building, Room 02A69
(571) 272-0772

RECEIVED
JUN -2 2004
(STIC)

Point of Contact:
Alexandra Wacławiw
Technical Info. Specialist
GMT 6A02 Tel: 308-4491

Searcher: _____
Phone: _____
Location: _____
Date Picked Up: 6-3-04
Date Completed: 6-3-04
Searcher Prep/Review: 7
Clerical: _____
Online time: 7

TYPE OF SEARCH:
NA Sequences: _____
AA Sequences: ①
Structures: _____
Bibliographic: _____
Litigation: _____
Full text: _____
Patent Family: _____
Other: _____

VENDOR/COST (where applic.)
STN: _____
DIALOG: _____
Questel/Orbit: _____
DRLink: _____
Lexis/Nexis: _____
Sequence Sys.: _____
WWW/Internet: _____
Other (specify): compugen

OM protein - protein search, using sw model

Run on: June 3, 2004, 07:04:28 ; Search time 23 Seconds
(without alignment)
2700.283 Million cell updates/sec

Title: US-09-769-699-2

Perfect score: 6294

Sequence: 1 MENTQKTVPTGFLGVYA.....DELFDLSGPIKGNINTEM 1203

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database : Issued Patents AA:*

1: /cgn2_6/prodata/2/iaa/5A_COMB.pep.*

2: /cgn2_6/prodata/2/iaa/5B_COMB.pep.*

3: /cgn2_6/prodata/2/iaa/6A_COMB.pep.*

4: /cgn2_6/prodata/2/iaa/6B_COMB.pep.*

5: /cgn2_6/prodata/2/iaa/PCOTUS_COMB.pep.*

6: /cgn2_6/prodata/2/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by the score of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3054	48.5	1452	4	US-09-127-227-2
2	183	2.9	35	2	Sequence 2, Appli
3	183	2.9	35	3	Sequence 9, Appli
4	131	2.1	757	3	Sequence 84, Appli
5	123	2.0	1074	4	Sequence 358, App
6	123	2.0	1074	4	Sequence 394, App
7	122	1.9	1096	4	Sequence 5764, App
8	118.5	1.9	370	4	Sequence 16913, A
9	117	1.9	855	4	Sequence 12681, A
10	111	1.8	4630	4	Sequence 2, Appli
11	111	1.8	5215	3	Sequence 2, Appli
12	110	1.7	790	4	Sequence 6059, Ap
13	106.5	1.7	3567	2	Sequence 4, Appli
14	106.5	1.7	3567	3	Sequence 4, Appli
15	106	1.7	774	1	Sequence 7, Appli
16	106	1.7	774	2	Sequence 3855, Ap
17	105.5	1.7	1095	4	Sequence 46, Appl
18	105	1.7	774	1	Sequence 48, Appl
19	105	1.7	774	1	Sequence 5, Appli
20	104.5	1.7	635	4	Sequence 5, Appli
21	104.5	1.7	635	4	Sequence 5, Appli
22	104.5	1.7	774	1	Sequence 5, Appli
23	104.5	1.7	1471	4	Sequence 3, Appli
24	103	1.6	774	1	Sequence 3, Appli
25	103	1.6	774	1	Sequence 4, Appli
26	103	1.6	3472	4	Sequence 4, Appli
27	102	1.6	729	1	Sequence 6, Appli

28	102	1.6	729	2	US-08-885-419-6	Sequence 6, Appli
29	102	1.6	774	1	US-07-747-901A-3	Sequence 3, Appli
30	102	1.6	774	1	US-07-935-312-3	Sequence 3, Appli
31	102	1.6	774	1	US-08-633-760-50	Sequence 50, Appli
32	101.5	1.6	773	1	US-08-019-870-1	Sequence 1, Appli
33	101.5	1.6	773	1	US-08-019-870-6	Sequence 6, Appli
34	101.5	1.6	774	1	US-08-019-870-8	Sequence 8, Appli
35	101.5	1.6	774	1	US-08-019-870-11	Sequence 11, Appl
36	101.5	1.6	774	1	US-08-633-760-52	Sequence 52, Appl
37	101	1.6	995	4	US-09-657-931A-1	Sequence 1, Appli
38	101	1.6	1024	4	US-09-562-737-48	Sequence 48, Appl
39	101	1.6	1466	4	US-09-262-537-20	Sequence 20, Appl
40	101	1.6	7257	3	US-09-335-409-5	Sequence 5, Appli
41	101	1.6	7257	4	US-09-568-102-5	Sequence 5, Appli
42	101	1.6	7257	4	US-09-567-969-5	Sequence 5, Appli
43	101	1.6	7257	4	US-09-568-480-5	Sequence 5, Appli
44	101	1.6	7257	4	US-09-568-486-5	Sequence 5, Appli
45	101	1.6	7257	4	US-09-568-472-5	Sequence 5, Appli
46	101	1.6	7257	4	US-09-567-899-5	Sequence 5, Appli
47	100.5	1.6	1321	1	US-08-261-822A-3	Sequence 3, Appli
48	100.5	1.6	1321	5	PCT-US95-0774A-3	Sequence 3, Appli
49	100.5	1.6	2616	6	5206163-3	Patent No. 5206163
50	100	1.6	1381	4	US-09-808-701A-25	Sequence 25, Appl
51	99.5	1.6	600	4	US-09-252-991A-29817	Sequence 29817, A
52	99.5	1.6	915	1	US-08-328-322-5	Sequence 5, Appli
53	98.5	1.6	801	4	US-09-351-150A-25	Sequence 25, Appl
54	98.5	1.6	910	4	US-09-134-000C-4288	Sequence 4288, Ap
55	98.5	1.6	2152	3	US-09-036-987A-3	Sequence 3, Appli
56	98.5	1.6	2152	3	US-09-370-700-3	Sequence 3, Appli
57	98.5	1.6	2152	4	US-09-603-207-3	Sequence 3, Appli
58	98	1.6	551	4	US-09-252-991A-24209	Sequence 24209, A
59	98	1.6	821	2	US-08-451-822A-13	Sequence 13, Appl
60	98	1.6	821	4	US-08-323-430-13	Sequence 13, Appl
61	97.5	1.5	660	4	US-09-252-991A-19282	Sequence 19282, A
62	97.5	1.5	769	1	US-08-471-570-8	Sequence 8, Appli
63	97.5	1.5	1024	4	US-09-562-737-50	Sequence 50, Appl
64	97.5	1.5	2680	4	US-09-489-039A-7973	Sequence 7973, Ap
65	97	1.5	537	1	US-08-173-508-2	Sequence 2, Appli
66	97	1.5	537	2	US-08-265-310-2	Sequence 2, Appli
67	97	1.5	537	3	US-08-951-743-2	Sequence 2, Appli
68	97	1.5	1469	4	US-09-262-537-58	Sequence 58, Appl
69	96.5	1.5	522	4	US-09-543-681A-5830	Sequence 5830, Ap
70	96.5	1.5	987	4	US-09-543-681A-7785	Sequence 7785, Ap
71	96	1.5	774	1	US-08-314-309A-21	Sequence 21, Appl
72	95.5	1.5	3170	2	US-07-642-734C-5	Sequence 5, Appli
73	95.5	1.5	3170	3	US-08-439-009A-5	Sequence 5, Appli
74	94.5	1.5	817	4	US-09-071-035-396	Sequence 396, App
75	94.5	1.5	817	4	US-09-489-039A-10407	Sequence 10407, A
76	94.5	1.5	1073	4	US-09-180-245-2	Sequence 2, Appli
77	94.5	1.5	6095	3	US-09-144-085-2	Sequence 2, Appli
78	94	1.5	550	4	US-09-328-352-5508	Sequence 5508, Ap
79	94	1.5	655	1	US-07-736-178C-2	Sequence 2, Appli
80	94	1.5	2910	1	US-08-466-033-183	Sequence 183, App
81	94	1.5	2910	2	US-08-444-733-183	Sequence 183, App
82	94	1.5	2910	2	US-08-464-134-183	Sequence 183, App
83	94	1.5	2910	2	US-08-461-361-183	Sequence 183, App
84	94	1.5	2910	2	US-08-485-910-183	Sequence 183, App
85	94	1.5	2910	5	PCT-US95-06286-157	Sequence 157, App
86	93.5	1.5	389	4	US-09-596-824-2	Sequence 2, Appli
87	93.5	1.5	544	4	US-09-198-452A-153	Sequence 153, App
88	93.5	1.5	685	3	US-08-947-965-74	Sequence 74, Appl
89	93.5	1.5	1536	3	US-09-413-814-10	Sequence 10, Appl
90	93.5	1.5	3038	2	US-08-450-332-2	Sequence 2, Appli
91	93.5	1.5	3038	3	US-08-637-640-2	Sequence 2, Appli
92	93.5	1.5	3241	4	US-09-841-786-1	Sequence 1, Appli
93	93	1.5	1113	3	US-09-629-616-3	Sequence 3, Appli
94	93	1.5	1177	3	US-08-754-490-10	Sequence 10, Appl
95	93	1.5	1177	3	US-08-754-490-12	Sequence 12, Appl
96	93	1.5	1177	3	US-08-922-505A-10	Sequence 10, Appl
97	93	1.5	1177	3	US-08-922-505A-12	Sequence 12, Appl
98	93	1.5	1177	3	US-09-360-952A-10	Sequence 10, Appl
99	93	1.5	1177	3	US-09-360-952A-12	Sequence 12, Appl
100	93	1.5	1177	3	US-09-360-952A-12	Sequence 12, Appl

ALIGNMENTS

RESULT 1

```
US-09-127-227-2 ; Sequence 2, Application US/09127227
; Patent No. 639354
; GENERAL INFORMATION:
; APPLICANT: David M. Knipe
; APPLICANT: Travis J. Taylor
; APPLICANT: Elizabeth McNamee
; TITLE OF INVENTION: Replication-Competent Virus Expressing A
; TITLE OF INVENTION: Fusion Protein
; FILE REFERENCE: HU98-05
; CURRENT APPLICATION NUMBER: US/09/127,227
; CURRENT FILING DATE: 1998-07-31
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PASTESEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 1452
; TYPE: PRT
; ORGANISM: herpesvirus
US-09-127-227-2

Query Match 48.5%; Score 3054; DB 4; Length 1452;
Best Local Similarity 49.8%; Pred. No. 2.7e-304;
Matches 609; Conservative 200; Mismatches 366; Indels 48; Gaps 17;

QY 1 MENTQKTVT---VPTGLGVY---ACRVEDLDLEISFLAARSTDSLLPLMRNLTV 55
DB 1 METPKTATTIKVPPGLGVYVARACPSEGL--LALLSARSGDADVAAPLVVGLTVE 58
QY 56 KTFSSLAUVSGARTTGLAGATILKLTSHFPYSVFVHGKHLPSAPNLTRACNA 115
DB 59 SGFEANVAVVGSRTTGLGPAVSLKLTTPSHYSSVVFVHGRHLDSTQAPNLRLCER 118
QY 116 ARERFGSRCCQPPVDGAVETTGAEICTRLGLEPENTILYLVWALFKEAVFNCVFLHY 175
DB 119 ARHFGSDYTPRGDLKHETTGALCERGLDPRALLVIVTEGFEKAVCINNTFLHL 178
QY 176 GGLDIVHNGDVIKIPFVQLFMDVNRVLPDPFTHRSIGEGFVYTPPYNTGLCH 235
DB 179 GGSKVTIGGAEVHRIPVYQLFMDPFSVIAEPFNANHRSIGENFTYPLPFNPLNR 238
QY 236 LIHDCVIAPMAVALVRNVTVARAGAAHLADENHEGAVLPDITYYFSSSGTGTAR 295
DB 239 LLFEAVGPAVALRCRNVDAVARAAHLADENHEGALPADITTFATFASQG--KTPR 296
QY 296 GARNDVNSTKSPSPSGGFERRLASIMAAADTALHAEIFNTGIYEETPTDIKEWPMFIGM 355
DB 297 GGR-----DGGKGPAGGFEQRLASVMAGDAALAESIVSMVFEPTDISAMPLCEGQ 351
QY 356 EGTLPRLNALGSYARVAGVIGAMVFPNSALYTEVEDSGWTEAKDGGPGSPFNRYQF 415
DB 352 DTAARANAVGAYLARAAGLVGMVFTNSALHTEVDVDDAGPADPKDHSK-PSYRFLV 410
QY 416 AGPHLAANPQTRDGHVL-----SSQSTGSSNTERFSDYALICGFGAPLLARLLFYL 469
DB 411 PGTHVAANPQVDREHVVVPGEGRTAPLVGGTQ-EFAGEHLMLCGFSPALLAKMLFYL 469
QY 469 ERCDAGFTGGHG-DALKYVTGTPDSETPCSLCEKHTEPCVCAHTVHRLRMRPFCQAT 527
DB 470 ERCDGGVIVGROMDVFVRYADNSQTDVPCNLCFTDTEHACVHTTLMRLRARHPKFSAA 529
QY 528 RQPIGVGTWMSQYSDCPGLNYPYLIIRKPGDQTEAAKATMDOTVRATLERLFDLEQ 587
DB 530 RQALGVGTWMSYSDCVLGNYPYAFSAKX-ADGSETARIMQETYEAAETERVMAELET 588
QY 588 BRLLDRGAPCSSEGLSSVVDHPTFRILDTLARIETQTFMKVLVETDYKIREGLS 647
DB 589 LQYVQAVPTANGRLTITNREALHTVNNVRQVVDVEVEQLAENLVEGRNFXFRDGLG 648
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QY 648 EATHSMALTEPDYSGAFCPITNPLVKRTHLAVVODLALSOCHCVFYGOQVEGRNFRNQF 707
DB 649 EANHAMSUTLDPYACGCPCLQLLGRNSNLAVYQDLALSOCHGVFAGSVGRNFRNQF 708
QY 708 PVLRRFVDFLFGGFISTRSTVTLSEG-PVSAFNPTLQDAPAGRTFDGLARVSVEVI 766
DB 709 PVLRRVMDMFNGFLSAKTLTVALSEGAATCAPSLTAGCTAPAESSEPGSVARVTLGFP 768
QY 767 RDIRVKNRWFVSGNCTNLSEARARLVCLASAYORQEKRVDMHLGALGFLKQFHGLLFP 826
DB 769 KELRVKSRVLFAGASANAASEAKARVASLQSAIKPKRVDILLOPLGFLKQFHAALFP 828
QY 827 RCMPPNSKSPNPQFWTLLQRONMPADKLTHEEITTTAAVKRFTTEYYAANFINLPPTCI 886
DB 829 NGKPPGSPNPQFWTALQENQLPARLLSREDIETIAFKKFSLDYGAINFINLAPNV 888
QY 887 GELAQFYMANILKYCHDSQYLINLTISIIGARRPRDPSPSVLHWIRKDVTSAADETQA 946
DB 889 SELAMYNANOILRYCDHSTYFINTLTALIAAGSRPPSVQAAA--SAGGAGLEAGA 945
QY 947 KALLEKTENLPELWTTAFTSTHLVRAANQPMVVLGISISKYHGAAGNNRVFOAGNWSG 1006
DB 946 RALMDAVDAHFGAWTSMFASCNLLRPVWAARPMVVLGLSISKYGMAGNDRVFOAGNWS 1005
QY 1007 LNGKXNVCPLEFFTRTRFIIACPRGGFCPVTPGSSGNRETTLSDQVRGIIVSGAMVQ 1066
DB 1006 LMGGKNACPLIFDTRKRVLACPRAGFVCAASNLGGGAHESSECEQLRGIISGGA 1065
QY 1067 LAIYATVVRVAVCARAHMAFDDWLSLTDDEFIARLDELHDIQIOTLETPTMVEGAL-- 1123
DB 1066 SSFVATVKSUGFRYQQOIEDWLLALLEDEYLSSEWELTARALRGNGENSTDALEVA 1125
QY 1124 -BAVKILDEKTAGDGETPTNLAFND--SCEPSHDTTSNVNINISGNSISGTVPLKRP 1180
DB 1126 HEAEALVSLQNGAGE-----VFNFGDFGCE-----DDNATPPGPGGAPGAPAFGRKRA 1173
QY 1181 PEDDELFDLSGIPKXGNITNEM 1203
DB 1174 FHGDDPFG-EGPPDKKGDITLDM 1195

RESULT 2
US-08-907-332B-9 ; Sequence 9, Application US/0807332B
; Patent No. 5959074
; GENERAL INFORMATION:
; APPLICANT: Dreyfus, David H.
; APPLICANT: Gelfand, Erwin W.
; TITLE OF INVENTION: PRODUCTS AND PROCESSES FOR REGULATION OF
; TITLE OF INVENTION: GENE RECOMBINATION
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Ross
; STREET: 1700 Lincoln St., Suite 3500
; CITY: Denver
; STATE: CO
; COUNTRY: U.S.A.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/807,332B
; FILING DATE: 28-FEB-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kovarik, Joseph E.
; REGISTRATION NUMBER: 33,005
; REFERENCE/DOCKET NUMBER: 2879-39
; TELECOMMUNICATION INFORMATION:
```

; TELEPHONE: 303/863-9700
 ; TELEFAX: 303/863-0223
 ; INFORMATION FOR SEQ ID NO: 9:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 35 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS:
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; US-08-807-332B-9

 Query Match 2.9%; Score 183; DB 2; Length 35;
 Best Local Similarity 100.0%; Pred. No. 1.6e-11;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 545 DPLGNAPYLILRKPGQTEAAKATMDTYRATLE 579
 DB 1 DPLGNAPYLILRKPGQTEAAKATMDTYRATLE 35

 RESULT 3
 US-09-338-876-9
 ; Sequence 9, Application US/09338876
 ; Patent No. 6187584
 ; GENERAL INFORMATION:
 ; APPLICANT: Dreyfus, David H.
 ; APPLICANT: Gelfand, Erwin W.
 ; TITLE OF INVENTION: PRODUCTS AND PROCESSES FOR REGULATION OF
 ; TITLE OF INVENTION: GENE RECOMBINATION
 ; NUMBER OF SEQUENCES: 32
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Sheridan Ross
 ; STREET: 1700 Lincoln St., Suite 3500
 ; CITY: Denver
 ; STATE: CO
 ; COUNTRY: U.S.A.
 ; ZIP: 80203
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/338,876
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/807,332
 ; FILING DATE: 28-FEB-1997
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Kovarik, Joseph E.
 ; REGISTRATION NUMBER: 33,005
 ; REFERENCE/DOCKET NUMBER: 2879-39
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 303/863-9700
 ; TELEFAX: 303/863-0223
 ; INFORMATION FOR SEQ ID NO: 9:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 35 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS:
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; US-09-338-876-9

 Query Match 2.9%; Score 183; DB 3; Length 35;
 Best Local Similarity 100.0%; Pred. No. 1.6e-11;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 545 DPLGNAPYLILRKPGQTEAAKATMDTYRATLE 579
 DB 1 DPLGNAPYLILRKPGQTEAAKATMDTYRATLE 35

RESULT 4
 US-09-413-814-84
 ; Sequence 84, Application US/09413814
 ; Patent No. 6225064
 ; GENERAL INFORMATION:
 ; APPLICANT: Gesellschaft fuer Biotechnologische Forschung mbH
 ; APPLICANT: Bristol-Myers Squibb, Co.
 ; APPLICANT: Beyer, Stefan
 ; APPLICANT: Bloeker, Helmut
 ; APPLICANT: Brandt, Petra
 ; APPLICANT: Cino, Paul M.
 ; APPLICANT: Dougherty, Brian A.
 ; APPLICANT: Goldberg, Steven L.
 ; APPLICANT: Hofle, Gerhard
 ; APPLICANT: Mueller, Joachim
 ; APPLICANT: Reichenbach, Hans
 ; TITLE OF INVENTION: DNA sequences for enzymatic synthesis of polyketide or
 ; TITLE OF INVENTION: heteropolyketide compounds
 ; FILE REFERENCE: PCT/US 99/23535
 ; CURRENT APPLICATION NUMBER: US/09/413,814
 ; CURRENT FILING DATE: 1999-10-07
 ; EARLIER APPLICATION NUMBER: DE 198 46 493.2
 ; EARLIER FILING DATE: 1998-10-09
 ; NUMBER OF SEQ ID NOS: 107
 ; SOFTWARE: Patent in Ver. 2.1
 ; SEQ ID NO 84
 ; LENGTH: 757
 ; TYPE: PRT
 ; ORGANISM: Sorangium cellulosum
 ; US-09-413-814-84

 Query Match 2.1%; Score 131; DB 3; Length 757;
 Best Local Similarity 21.1%; Pred. No. 0.0012;
 Matches 146; Conservative 84; Mismatches 251; Indels 212; Gaps 37;

 QY 54 VEKFTSSLAIVSGART---TGLAGGITLKTTHSHFVPSVVFHGGKHVLPSSAAPNL 109
 DB 129 LERTLPVAVISADARAALTSAGVIVAS-----LPASAAA-- 167
 QY 110 TRACNAARERFGSRGQPPVDGAVETTGAEICTRLGLEPENTILYLVVTFALFKEAVFMC 169
 DB 168 ---AALQRLWATDQPS-PGPIBPGCA---ALRPESV----- 198
 QY 170 NVELHY-----GGLDIVHINHGDIPIPLFPVQLFMPDVNRLVPPDPNTHRSIGEGFY 224
 DB 199 -AFLQYTSGSTGPKGVMLTHGNL-----LHNSRLIAHGFDLTSPDPV-----GVIV 244
 QY 225 PTFYNTGLC-----HLIHDCVIAPMAVALR-----VRNVAV---ARGAAHLAFD-- 267
 DB 245 LPVHDMLGILGILQALYRRIRVALMSPLSLQRPWRWLRAVSALGASVSGGPNFAYDLC 304
 QY 268 ---ENHEGAVLPDITYTYFQSSSGTTTARGARDVNSTSKPSPGPFERLASINA 323
 DB 305 VRKSSEERAALD-----LRSEWAVTGAEPVRAADTLDRFARPAVSGFRRE--AFYP 355
 QY 324 ADTALHAEVIFNTGIYEETPTDIKEWPMFIMGEGTLPRNLALGSVYARVAGVIGAMVF-- 381
 DB 356 CYGLAEATLIVSGARAEAPV-----LARLAPEEVELGRAVASAAE--GARVFG 403
 QY 382 ---SPNSALYLTVEYEDSCWTEAKDGGPSPFNRYQFAGPHLA-----ANPQTRDGHV 432
 DB 404 SGRALDPRA---VAIVDPAG---NELGPG-EIGEIV-VSGSPVAVYWGPRE-----447
 QY 433 LSSQSTGSSNTERFSDYLAICGFGAPLRLLFYLERCDAGATGTHGDKLYVTGT-- 490
 DB 448 -----ETEATFGATLAGSAAPR-----YLRTGDLGLFRGGE-----LFVVGRSK 486
 QY 491 -----FDSEIFCSICEKH--TRPVC--AHITVHLRORM-----PRFGQATFQ 529
 DB 487 DLILGRNHFQDIEKTVESHRVPGCSAAFSVEHEGERLAVVCVDPVRAADPRE 546
 QY 530 FIGVFGTMSQYSDCDPLGNAPYLILRKPGQTEAAKATMDTYRATLERLIDLEQER 589

Db 547 IVAAREAVTAHQ---LVAHVALIAPGALPKTSSGVRRECRFALE---DALGER 598
 QY 590 -----LLDRGAPCSSEGLSSVIVDHTPTFRILLTLRAIEQTTQPMKVLVETRYKI 642
 Db 599 HVAFAPELLDDASPPDD---APPETEESGRSLDALS---TLARALRDLAQIDAL 651
 QY 643 ----REG-SEATHSMALTPDPVSGAFCTITNEL 671
 Db 652 PISRFGLSLAAVELQHAFAQVETGRAIPLTSL 684

RESULT 5

US-09-071-035-358
 ; Sequence 358, Application US/09071035
 ; Patent No. 6448043
 ; GENERAL INFORMATION:
 ; APPLICANT: Gil H. Choi
 ; TITLE OF INVENTION: Enterococcus faecalis Polynucleotides and Polypeptides
 ; NUMBER OF SEQUENCES: 496
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Human Genome Sciences, Inc.
 ; STREET: 9410 Key West Avenue
 ; CITY: Rockville
 ; STATE: Maryland
 ; COUNTRY: USA
 ; ZIP: 20850
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage
 ; COMPUTER: HP Vectra 486/33
 ; OPERATING SYSTEM: MSDOS version 6.2
 ; SOFTWARE: ASCII Text
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/071,035
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER:
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: A. Anders Brookes
 ; REGISTRATION NUMBER: 36,373
 ; REFERENCE/DOCKET NUMBER: PB3692
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (301) 309-8504
 ; TELEFAX: (301) 309-8512
 ; INFORMATION FOR SEQ ID NO: 358:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1074 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-09-071-035-358

Query Match 2.0%; Score 123; DB 4; Length 1074;
 Best Local Similarity 18.3%; Pred. NO. 0.016;
 Matches 206; Conservative 150; Mismatches 415; Indels 352; Gaps 52;

QY 250 RYRNTAVARGAHLAFDENHGAVALPDDITYFYQSSSSSTTTARGARRDNVNSTKPS 309
 Db 67 RTSLVAEYNGAKQVFC-IERGVSIPTEVHG- - - - - QKNPL 104
 QY 310 PSGGFERRLASIN--AAPTALHAEIFNPTGIYEE- - - - - TPTDIKENPMFI 353
 Db 105 PMSOKAKLVSVLWEKAGTDIDTNVQAQMIWEENVGYKLHSIKRLGASVDIK- - - - - 158
 QY 354 GMEGTLPRNLALGSYAR- - - - - VAGVIG-AMVFPNSALYLTEVEDSGMTEAKDGGP 405
 Db 159 STEGKINK--ALEEYQKPSFNTTVKYLQSTTLIDKNELNLSFDFKVVQNTA- - - - - 211
 QY 406 GPSFNRFYQAFPHLAANFQTRDRGHVLSQSTSSNTFSDVYALICGFGAPLARLL 465

Db 212 ----NIDRVYIGNQVLTP- - - - - NSNSKSGTLLKKSGAGTGP-VAYKK 251
 QY 466 FYLERCDAGATGGHGDALKYVTGTFDFSEIPCSICEKHTRPVCAHTTVHRLRQMRPFQ 525
 Db 252 AGIQTVAGALLDKPNTAIKINVEIKGS-LKIKKIDSGDIVETVFL- - - - -DFGK 304
 QY 526 A-----TROPICVPGTWNQSYSDCDPLGNYA- - - - -PYLLRKPQDQIFAAKATM 570
 Db 305 ALPSKDVTTDKGI- - - - -SILDGIPHGKVTITEKSVDPYPMIDTTPMAATIKAGETI 358
 QY 571 QDTYRATLERLFDLEQERLLDRGAPCSSEGLS- - - - -SVIVDHT- - - - -FRRILDTLRA 621
 Db 359 SMTSKNMRQKQILLEKGT-VETGTDLWNDNYSLAGNTFAIRKDSPAGEIVQBITTDEKG 417
 QY 622 RIEQTTQPMKVLVETRYKIRELSSEATHSMALTPDP- - - - -YSGAFPPTNFIKRT 675
 Db 418 RAE--TPKELANALELGYVYTE--TKSSNGFVNTFKPTKVELKYANQTVALTNSVNVK 473
 QY 676 HLAUVQDLAL- - - - -SQCHCVFYQGV- - - - -EGRNFRNQFOPVLARRRVDL 717
 Db 474 NOEITGETTLTKEDKDTGNSQGAEPKABYTLFTAKDQGAQVAKWSEAFK- - - - -TEL 526
 QY 718 FNGGFISTRISITVILSE-GPVSAFNPITLQ- - - - -DAPAGRTFDGLARVSV- - - - - 764
 Db 527 VKGTASDETITLALDEKNQAVKHLAINEFYWOETKAPEGYTLDETKEYSVSIKVDNNE 586
 QY 765 ----VIRDIRVNRVW- - - - -PSGNCNTNLSEAA- - - - -PARLVGLASAYQROEKR 805
 Db 587 KNAVITRDVTAKEQVIREFGDFKFAAGSADCTAGTGNLSPKVSPLGKYEITGAEDKA 646
 QY 806 VMLHGLGAP- - - - -LLQFPHGLLEPRGM- - - - -PNSKS- - - - -PNP 838
 Db 647 TTACNEQIGFDGPGYGFENLPYGYLLLEEIA- - - - -PEGFQKITPLEIRISTTKENKDDVAKS 703
 QY 839 QWFWTLLQNRQ- - - - -MPADKLTHEEITTAAVKRFTEEVAAINFILNP- - - - -PTCIGE 888
 Db 704 EYVFITIEEGOKQPIKVMVTVPEKLTNE- - - - -FSVSLNRLMLYDLPEKEDSLTS 754
 QY 889 LAQFMANLILKYCHSOYLINTLTSITGARRRDPSSVLHWIKD- - - - -VTSADITQ 945
 Db 755 LATWKDGNKLNLTDFTE-LVDKL- - - - -RYNLHEIKEDWYVVAQIDVEA- - - - - 799
 QY 946 AKALLEKTENLPWLTTAFTST- - - - -HLVRAAMNORPMVVLGISTISKYHGA 992
 Db 800 TKAQEKDEKAKPVVIAETATLANKEKTGTWKLHLKLTAEQ- - - - -VLDKSVLNFVY 853
 QY 993 AGNRRVFOAGNWSGLNGKNCVPLTFDTRTRFIACPRGFGICPVTPGSSGNRETLSD 1052
 Db 854 YENKVAPEAGNE- - - - -PVA- - - - -KDALNN 875
 QY 1053 QVRGIIVSGGAMVOLAIYATVAVAGAR- - - - -AQHMAFDDWLSLTDDEFLARDL- - - - - 1102
 Db 876 QAQ- - - - -TVNCIIEHVSIQTKAHLSDGSQTFHGDVMDMDFDVSVTHDVL 923
 QY 1103 --BELHDOIOTLETPTVEGALEAVKILDE- - - - -KITAGD- - - - -GETPTNLAFNFD 1149
 Db 924 GSKAFETILYALLPDGTNKEIWKSGKIEHVNDKEFTKTVLAEKVDTKYEGEGTKFTF- - - - - 982
 QY 1150 SCEPHSDTTSNV- - - - -LMSGNSITSGSTVPGIKRPPEDDE 1185
 Db 993 -TEINYKDGNGVNGKHEDLKEKSTLTPTKPEVTPSTPKQPE 1024

RESULT 6

US-09-071-035-394
 ; Sequence 394, Application US/09071035
 ; Patent No. 6448043
 ; GENERAL INFORMATION:
 ; APPLICANT: Gil H. Choi
 ; TITLE OF INVENTION: Enterococcus faecalis Polynucleotides and Polypeptides
 ; NUMBER OF SEQUENCES: 496
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Human Genome Sciences, Inc.

STREET: 9410 Key West Avenue
CITY: Rockville
STATE: Maryland
COUNTRY: USA
ZIP: 20850
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4mb storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/071,035
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: A. Anders Brooks
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PB36992
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 394:
SEQUENCE CHARACTERISTICS:
LENGTH: 1074 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-071-035-394

Query Match 2.0%; Score 123; DB 4; Length 1074;
Best Local Similarity 18.3%; Pred. No. 0.016;
Matches 206; Conservative 150; Mismatches 415; Indels 352; Gaps 52;

QY 250 RVRNVTAVAGAAHLADENHEGAVLPDITTYTQSSSSGTTTARGARENDVNSKPS 309
DB 67 RTTSLYAEYNGAKQTVFC-IIEPGVSIPTVTHGY-----QKNPL 104

QY 310 PSGGFERRLASIM--AADTALHAEVIFNTGIYEB-----TPTDIKWPMTFI 353
DB 105 PMSDKAKVSVLWEKAGTDIDTNVQAQMIWEENVGYKLHSIKRLGGASVDIK-----158

QY 354 GMEGTLPRLNALGYTAR-----VAGVTG-AMVFPNSALYITEVEDSGMTEAKDGGP 405
DB 159 SIEGKINK--AIEBYQKKPSFHNITVTKILGQSTLLDKNELNLSEFDKVVQNTA-----211

QY 406 GPSNRRFVQFAGPHLAANPQDRDGHVLSQSSTGSSNTFSDVYALICGFGAPLLARLL 465
DB 212 ----NIDRVIGNQLVTP-----NSNSKSGTLTKKSAGTGTP-VAYKK 251

QY 466 FYLERCDAGATGGHGDALKYVGTGTFDSEIPCSLCEKHTRPVCAHTTVHLRQMRPFQ 525
DB 252 AGLQTVAGALDKONTVAIKINVTGKS-LKIKKIDKESGDIPTVFHL-----DFGK 304

QY 526 A-----TRQPIGVGTWNSQYSCDPLGNYA-----PYLILKPGDQTEAAKATM 570
DB 305 ALPSKDVTTDKGHI-----SILGIPGHTKVTITEKSVDPDPYMDITPMAATIKAGETI 358

QY 571 QDTRATLERLIDLEERLIDRAGPCSEGLS-----SVIVDHPT---FRRLIDTLRA 621
DB 359 SMTSKNWRQKQILLEKTG-VETGTDLWNDNYSLAGNTFAIRKDSPAGEIVQEIITDEKG 417

QY 622 RIBOTTQFMKVLVETRDYKIREGLSEATHSMALTFDP-----YSGAFPIITNLFVKRT 675
DB 418 RAE--TPKELANALELGTYYVTE--TKSSNGFVNTFKPTKVELKYANQTVVALVTSNVKGG 473

QY 676 HLAVVQDLAL-----SOCHCVFYGOOV-----EGNFRNQFQVRLRRFVDL 717
DB 474 NQBITGTTLTIKEDXTDNGSOGKAEFKGAEYTLFTAKDQGAQVKNSEAFK-----TEL 526

QY 718 FNGGFISTRSITVTILSE-GPVSAFNPTLQ-----DAPAGRTFGDGLARVSVE-----764
DB 527 VKGTRASDETTLALDEKNQVAVKHLAINFYFQWSTKAPGEGYTLDETYPVSIKKVDNNE 586

QY 765 ----VIRDIRVKNRVV-----PSGNCNLSSEA-----RARIYGLASAYORQEK 805
DB 587 KNAVITRDVTAKEQVIRFGDFPFKAGSADGTAETGFDNLSFKVPLEGTXTXITGAEDKA 646

QY 806 VDMHLGALGF-----LLKQFHGLLFFPRGM-----PPNSKS-----FNP 838
DB 647 TTACNEQLGFGYGVKFNLPYGDYLLLEIEA---PEGFKITFLPFIIRSTFKENKDDYAKS 703

QY 839 QMFWTLLQNRQ-----MPADKLTHEIITIAAVKGFTEYYAAINFLP--PTCIGE 888
DB 704 EYVFTITEEGQKQPIKVMVTPYEKLTNNE-----FVSLNRLMLDYLPEKEDSLTS 754

QY 889 LAQFYMANLILKYCDHSOVLNLTLSIITGARPRDPSSVLHWIKD---VTSAADIEFQ 945
DB 755 LATWKGNGKLNLTLPTE-LVDKL-----RYNLHEIKEDWVVAQAIDVEA-799

QY 946 AKALLEKTENLPELWTTAFTST-----HLVRAAMNQRPVMVLGISISKYGA 992
DB 800 TRAAQEKDEKAKPVVIAETATLANKEKTGTWKILHLTAEQ-----VLDRKSIVLFN 853

QY 993 AGNNRVFQAGNWSGLNGKVCPLTFDTRRFLIACPRGGFCPTVGTGSSGNRETTLS 1052
DB 854 YENKVAFEAGNE-----PVA-----KQASLNN 875

QY 1053 QVRGIIVSGGAMVQLAIYATVVAVGAR-----AQHMAFDDWLSLTDDEFLARDL--1102
DB 876 QAA-----TVNCTTIERHYSIQTKAHLSDGQSTFTHGVDVMDPDDVSVTHDVL 923

QY 1103 ---BEIHDQIIQLETPWTVVEGALEAVKILDE-----KTTAGD---GETPTNLA 1149
DB 924 GSKEAFETILYALLPDGNTKEIWSKIEHVNDEKFTKVLAEKVDTGKYPEGTKFTF-982

QY 1150 SCEPSSHDTTSNV-----LNISGNSISGSTVPGGLKRPPEDDE 1185
DB 983 -TEINVEKDGNVNGKHNEDLKEKSQTLTPKEVPTTIPSTPKQPE 1024

RESULT 7
US-09-134-000C-5764
; Sequence 5764, Application US/09134000C
; Patent No. 6617156
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; FILE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-032
; CURRENT APPLICATION NUMBER: US/09/134,000C
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/055,778
; PRIOR FILING DATE: 1997-08-15
; NUMBER OF SEQ ID NOS: 6812
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5764
; LENGTH: 1096
; TYPE: PRT
; ORGANISM: Enterococcus faecalis
US-09-134-000C-5764

Query Match 1.9%; Score 122; DB 4; Length 1096;
Best Local Similarity 18.5%; Pred. No. 0.02;
Matches 208; Conservative 149; Mismatches 410; Indels 360; Gaps 53;

QY 250 RVRNVTAVAGAAHLADENHEGAVLPDITTYTQSSSSGTTTARGARENDVNSKPS 309
DB 89 RTTSLYAEYNGAKQTVFC-IIEPGVSIPTVTHGY-----QKNPL 126

QY 310 PSGGFERRLASIM--AADTALHAEVIFNTGIYEB-----TPTDIKWPMTFI 353
DB 127 PMSDKAKVSVLWEKAGTDIDTNVQAQMIWEENVGYKLHSIKRLGGASVDIK-----180

[illegible]

QY	51	NLTVEFTXTSSSLAVV-----SGARTTGLAGAGITLKLTTSHFVPSVPVPHGGKHVLP	102
Db	166	SLUTVDAQSSLLVAVHLACESLRAGSSTALV-AGVNL-----NILA	206
QY	103	SSAAPNLTRACNAARERFGFSRCQGPVPDGAVENTTGAEICTRIGLGFENTILYLVVTFALF	162
Db	207	ESA-----VTEERFG-----GLSPDGTAYTFDARA--	231
QY	163	KEAVFMCNVLHYGGLDVIHINHGDVIRPLFPVOLFMPDVNRLVDPFNTWTHRSIGEGF	222
Db	232	-----NGFVRGEG-----GGVVVLKPL-----SALADGDRVH-----GV	261
QY	223	VYPTPFYNTGLCHLHDCVIAPMAVALVRNVITAVARGAAHLAFDENHCEGAVLPDPDITYT	282
Db	262	IRASAVNNDG-----ATFGLTVPSRAAQEKVLYREAYRKAALDPS-AVQ	303
QY	283	YFOSSSGTTTARGARRNDVNSTKSPSGGPFERRLASMAADTALHAEVIFNTGIYEET	342
Db	304	YVELHGTGT-----PVGDPIEAALGAVLGSARPADDEPL-----LVGSA	342
QY	343	PTDIKEWPMFIMEGTLPRLNALGYSYTVARGVIGAMVFPNSALYLTEVEDSGMTEAKD	402
Db	343	KINVGHLEGAAGIVGLIKTLLALG--RRRIPASLNFTPHDPDLP-----DTLGLDVDP	394
QY	403	GGPGPSFNRFYOPAGPHLAANPOTDRD-----GHVLSQSQTSGSNNTFESVD	448
Db	395	G-----LREWPHDPRELLAGVSSFGMGGTNAHVWLVSEGAQGEQOEGID	438
QY	449	YLALICGPGAPILARLLFYLERCDACA-----FTGGHGDAK-----VYTGTFDSBI-P	496
Db	439	EETPV-----DSGAALPVVVTGRGGEALRAQAARLHBAVEADPELAP	480
QY	497	CSLCEK--HTRPVCAHTTV-----HRLRQMRPFQOATROPICVFQTMNSQYSDCDPLG	548
Db	481	AALARSIVITRTVPTHRSVVLPADRALLDGLGALAAGTAPGVVGTG-----	528
QY	549	NYAPYLILKPGQDTAAKATMODTVRAULERLFDLEQLERLLDRGAPCSSEGSLSSVVD	608
Db	529	-----PAPG-----RLAVLF-----SGQAQRTGMGM-ELYAA	555
QY	609	HPTRRILDTLRARIBOTTQFMKVLVETRD-----YKIREGLSEATHSNALT	656
Db	556	HPAFATFAVAEAELPDLDRPLAELVAAGDTLDRVHTQPALFAVEALHRLVESGVGT	615
QY	657	FDPSGAFCPITNFLVKRTHLAVQDLALSCQCHCVYGOQVEGRNFNQPVLLRRFVD	716
Db	616	PDLLAGH-----SVGEISAAHVAGV--LSLRDA-----ARLVAAGRILMQALP-----	656
QY	717	LFNGGISTRESIVTTLSEGPVSAPNPTLGODAPAGRTFGDGLARVSVEVIRDVRKVRV	776
Db	657	--EGGHAM-----VAVEASEEVL--PHL-----AGRERELSLAAM-----GPRAVV	694
QY	777	FSNGCTNLSEAPARLVGLASAYQROEKRVMDLHGALGFLKLOPHGILF-----	825
Db	695	LAG-----ABRAVLDAELLREQRRTKLSVSHA-----FHSPLMEPMLDDFRVV	741
QY	826	-----PR-----GHPPNKSXSNPQW-----FWTLLQRNQMPADKLTHEBITTAAY	866
Db	742	EELDFQEPVRDVVSVTVTGLFVFTA-----GOWTDPYEW-----VDQV-RRPVRFUDAV	787
QY	867	KRTEVEYAAINFINLPP--TCIGELAQFYMANLILKYCDHSQYLIINTLTLSIITGAREPRD	924
Db	788	-RTLESAGDTFLELPGDGVCSAMAADSV-----RDQEAATAVSALRXG--RP-E	833
QY	925	PSVILHWIKDVTSAADIEFQAKALLEKTENLPDLWTAPTSTHLYVRAMNQRPVVLGI	984
Db	834	PQSLLAALTTFVVRGHVDV-----MTAAHSGTGTVRVPL-----PTYAFQR	874
QY	985	SISKYHCAAGNRVRFQAGNWSGLNGKNVCPLFTFDRTRFIIACPRGGFICPTVGPSSG	1044
Db	875	ERHWFQGAARTAAPLTAGR-SGTGAG-----TGPAAG	905
QY	1045	-----NRETTLSQVRGIIVSGGAMVOLAIYATVWRA-VGARA	1081

Db 906 VTSGEGEGEGAGAGGDRPARHETT--ERVRAHVA--VLEDDPTFVELGLTF 957
Qy 1082 QHMAFDWLS-----LTDDEFIARDLEELHDQIQTLETPTWTEGALBAVKILDEKTTA 1135
Db 958 KELGFDLSMSVELRNALVDDTGLRPSGLLFDH-----PTP-----RALAA--HLGDLITG 1006
Qy 1136 GDGETPTNLAFNDSCEPS--HDTTSNVLNISGNSGSTVCLKPEPPDEDFDL---- 1189
Db 1007 GSGETG-----SADGIPPTADTTAEPIAIG--MACRYPGGVTSPEDE--LWRLVAEG 1056
Qy 1190 -----SGIPIKHG 1197
Db 1057 RDAVSGLPTRDG 1068

RESULT 11
US-09-105-537-2
; Sequence 2, Application US/09105537A
; Patent No. 6265202
; GENERAL INFORMATION:
; APPLICANT: Sherman, D.H.
; APPLICANT: Liu, H.
; APPLICANT: Xue, Y.
; APPLICANT: Zhao, L.
; TITLE OF INVENTION: DNA encoding methymycin and pikromycin
; FILE REFERENCE: 600.438US1
; CURRENT APPLICATION NUMBER: US/09/105.537A
; CURRENT FILING DATE: 1998-06-26
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 5215
; TYPE: PRT
; ORGANISM: Streptomyces venezuelae
US-09-105-537-2

Query Match 1.8%; Score 111; DB 3; Length 5215;
Best Local Similarity 19.7%; Pred. No. 5.2;
Matches 250; Conservative 109; Mismatches 419; Indels 494; Gaps 66;

Qy 51 NLTVKFTTSSLAV-----SGAETTLGAGAGITLKLTTSHFVSFVFGHGHVLP 102
Db 166 SLTVDAQAQSSSLVAVHACHSLRAGESSTALV-AGVNL-----NILA 206
Qy 103 SSAAPNLTRACNARERFGFSRCQPPVDGAVETTGAEICTRLGLEPENTILYLVVTLF 162
Db 207 ESA-----VTEERFG-----GLSPDGTATFDARA-- 231
Qy 163 KEAVFMCNVFLHYGGLDIVHINHGDVIRIPLFPVOLPMPDVNRLVPPDPFNTHRSIOEGF 222
Db 232 -----NGFVRGEG-----GGVVVLKPL-----SRALADGDRVH-----GV 261
Qy 223 VYPTPFYNTGLCHLHDCVIAPMAVALVRNVTAVARGAAHLAFDENHEGAVLPDDITYT 282
Db 262 IRASAVNNDG-----ATPGLTVPSRAAQEKVLRAYRKAALDPS-AVQ 303
Qy 283 YFQSSSSGTTTARGARRDNVNSTKSPSGFERRLASIMAADTALHAEVIFNTGYYEET 342
Db 304 YVELHGIGT-----PVGDPTEAAALGAVLGSARPADEPL-----LVGSA 342
Qy 343 PTDIKENPMFTGMBGTLPRLNALGSYARVAGVIGAMVFPSPNSALYLTVEVDSGTEAKD 402
Db 343 KTNVGHLEGAAGIVGLIKTLALG--RRRIPASLNFTPHDIPDL-----DTGLGLVDP 394
Qy 403 GGPSPFNRFQFAGPHLAANPQTRD-----GHVLSQSGTSSNTEFSVD 448
Db 395 G-----LREWPHDPDRELLAGVSSFGMGGINAHVVLSEGAQCGEQPID 438
Qy 449 YLALICGFGAPLLARLLFYLERCDAGA-----FTGGHGDALK-----YVTGTFDSEI-P 496
Db 439 BETPV-----DSGAALPFVVTGCGEALRAQARELHAVEADPELAP 480

Qy 437 CSLCEK--HTRPVCAHTTV-----HLRQMRPFQGAQRQPIGVFGTMSQYSQDCDPLG 548
Db 491 AALARSIVTTRVTHRSVVLAPDRARLLDGLGALAAGTAPGVVTGT----- 528
Qy 549 NYAPYLILRKFGDQTEAAKATMQTYRATLERFLIDLEQERLLDRGAPCSSEGSLSSVVD 608
Db 529 -----PAPG-----RLAVLP-----SQGAQRTGCMG-ELYAA 555
Qy 609 HPTFRRLDTRARIEQTTPQPMKVIYETRD-----YKIREGLSEATHSMALT 656
Db 556 HPATAPADAVAEELDLDRPLAEALVAAGTDLRTVHTQPALFAVEVALHRLVESMGVT 615
Qy 657 FDPYSGAPCPTITNLFVZKTHLAVVQDLALSCQCHVFYQQQVEGRNFRNQFVLRRRFPVD 716
Db 616 POLLAGH-----SVGEISAAHVAGV--LSLRDA-----ARLVAARGRLMQALP----- 656
Qy 717 LFNGGFISTRISITVTLSEGPVSAPNPTLQDAPAGRTFDGDLARVSVEVIRDIRKRVV 776
Db 657 --EGGAM-----VAVEASEEEVL--PHL-----AGRERELSLA--VN-----GPRAV 694
Qy 777 FSGNCTNLSBAARARLVGLASAYORQEKRVDMHAGLGLLKLQPHGLLF----- 825
Db 695 LAG-----AERAVLDVAELLREQGRRTKRLSVSHA-----FHSPLMEPLDFFRVV 741
Qy 826 -----PR-----GMPENSKSPNQW-----FWTLQORNQMPADKLTHESEITTTAAV 866
Db 742 EELDFQEPKRVVWSTVGLPVTA---GQWTDPEYV-----VDQV-RRPVRFDAV 787
Qy 867 KFTTEEYAAINFILPP--TCIGELAQFYMANLILKYCDHSOYLINTLTSIITGARPRD 924
Db 788 -RTLEESGADTFLELPGDVGCSAADS--RDQEAATAVSALRKG--RP-E 833
Qy 925 PSSVLHWIRKDVTSAAADIETQAKALLEKTENLPELWTTAFTSTHLVRAAMNQRPMVILGI 984
Db 834 QSLLAALTTVVRGHVD-----WTAAGSTGTVRVPL---PTYAFOR 874
Qy 985 SISKTHGAAGNRVFOAGNWSGLNGKVCPLFTEDTRRFLIACPRGFCPTGSSG 1044
Db 875 ERHWFPGAARTAAPLTAGR-SGTGAG-----TGPAAG 905
Qy 1045 -----NRETTLSQDVRGIIVSGGAMVQIAIYATVVRA-VGARA 1081
Db 906 VTSGEGEGEAGAGGAGGDRPARHETT--ERVRAHVA--VLEDDPTFVELGLTF 957
Qy 1082 QHMAFDWLS-----LTDDEFIARDLEELHDQIQTLETPTWTEGALBAVKILDEKTTA 1135
Db 958 KELGFDLSMSVELRNALVDDTGLRPSGLLFDH-----PTP-----RALAA--HLGDLITG 1006
Qy 1136 GDGETPTNLAFNDSCEPS--HDTTSNVLNISGNSGSTVPGKRPPEDEDFDL---- 1189
Db 1007 GSGETG-----SADGIPPTADTTAEPIAIG--MACRYPGGVTSPEDE--LWRLVAEG 1056
Qy 1190 -----SGIPIKHG 1197
Db 1057 RDAVSGLPTRDG 1068

RESULT 12
US-09-543-681A-6059
; Sequence 6059, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
; FILE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2769.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 6059
; LENGTH: 790

TYPE: PRT
ORGANISM: Proteus mirabilis
US-09-543-681A-6059

Query Match 1.7%; Score 110; DB 4; Length 790;

Best Local Similarity 19.1%; Pred. No. 0.19; Indels 250; Gaps 42;
Matches 171; Conservative 124; Mismatches 350;

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QY 350 PMFIMGEGTL-----PRLNALGSYTRAVAGVIGAMVFSN 384
DB 34 PLFVGRKSKHLEAAMNDKQIMLVAKQDASTDEFGVNDLFS-VGTVASVLQMLKLPDG 92
QY 385 SALYLTE-VEDSGWTEAKDGGPGPSNRRFYQFAGPHLAANPQTDROGHVLSSTGSSNT 443
DB 93 TVKVLVEGIRRAKITTLSDNG-----EYFQAKAEYLDTPVVDEREQEVNLR---TAIN 142
QY 444 EFSVDYLALICGFGAPLLARLLFLYERCDAGAFGGH-----GDALKY 486
DB 143 QFE-GYIKLNNKTPPEVLASLHAISAKLADTASHMPLKDKQAVLEMSDVTERLEY 201
QY 487 VTGTFDSEIPCSLCEKTRVCATHTVHRLRQMRP-----FGQATROPIGVFGFMNQ 540
DB 202 LMAWMESEIDLLQVEKRIR-----NRVKQMEKSQREYVLENEQMKAIQKELGEMDDA 253
QY 541 YSCDPLGNVAPVILLKPKGDQTEAAKATQD-----TYRATLERLFTDLQEERLLDR 593
DB 254 PDEMESLKRKIB--AAKMPKEAREKTEAELOKLMSPMSAEATVRSYIDMWVQ----- 306
QY 594 GAPCSSLGSLSVIHDPTFRRIIDTFARIEQTTTFMKVL-VETRDYKIREGLSEATHS 652
DB 307 -VPNSR--SKVKDLVAKQAEVLDTDHYGLERKVERILEVLAVQSRVSKIGPI----- 357
QY 653 MALTFDPSYG-----AFCSITPLVQRTHLAVVQDLALSQCCHCVFGQOQVEGRNQP 706
DB 358 LCLVGPFGVGTSLSGQIAKATGRKYRMALGGVRDEA-----EIRGH----- 400
QY 707 QPVLRREFVDLFWNGGFTSTRSITVTLSEGPVSPAPNPTLGQDAPAGRTFD--GGLARVSV 764
DB 401 -----RRYVIGSMPEKLIKQMA-----KVGKKNPLFLDDEIDKQSSDMRGPASALL 448
QY 765 VI-----RDIRVKNR-----VFGNCTNLSEAA-----RARLVGLASAYQRQKRV 807
DB 449 VLDPEQNIADFNDHYLEDVYDLSDFVATSNMNIAPAPLLDRMEVIRL-SGYTEDEK--- 504
QY 808 MLHALGFL--KQFGLLFFRGMPNPSKSPNQFWTLLORNQMPADKLTHESITIAAV 866
DB 505 -LNTAKQHLLPKQ-----IERNALKENELTIHDSAIMGII 538
QY 867 KRFTEEVAANFI--NLPPTCIGELAQFYMANLILKYCDHSQYLINTLTSIITCARRPRD 924
DB 539 RYVTR--AGVRESLEISKLRKAVKQLMDSTI-----KHIEDENNLDYLV-GVRK--- 589
QY 925 PSSVLHWIRKD-----VTSAADIEQAKALLEKTENLPDLWTAPT-STHLVRAAMNQ 976
DB 590 ---VDYGRADTENRIGMVTGLAWTEVGGDLITITETASVPQKGLTFTGSLGEVMOESI 645
QY 977 RPYVVLGTSISKYHGAAGNRRVFQAGNWSGLNGKNCPLFTFORTRRFIIACPRGGFIC 1036
DB 646 AAMTVVRARADKL-----GNG-----DFYEKDIHVHVEGA--T 679
QY 1037 PVTGPFSSGNRETT-----LSDQVRGIVSGAMVQIAIYATVVRVARGAR-----AQMAP 1086
DB 680 PKDGFAGIAMCTALVSSLTGNPVRSDVAMTG---EITLRQVLPFIGLKEKLIAAHRGG 736
QY 1087 DDWLSLTDEFLARDLELHQIICLTETPTVVEGALEAVKILDEKTTAGDGETP 1141
DB 737 IKTVLIPDN--KRDLESEIPENIVADLD-----IHPVKTIEVLTIALEKSP 781

```

RESULT 13
US-07-642-734C-4
Sequence 4, Application US/07642734C
Patent No. 5824513

GENERAL INFORMATION:
APPLICANT: Katz, L
APPLICANT: Donadio, S
APPLICANT: McAlpine, J B
TITLE OF INVENTION: Recombinant DNA Method for Producing
Erythromycin Analogs
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Edward H. Gorman
STREET: Abbott Laboratories D377/AP6D-2 One Abbott
STREET: Park Rd
CITY: Abbott Park
STATE: IL
COUNTRY: US
ZIP: 60064-3500

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA: US/07/642,734C
FILING DATE: 17-JAN-91
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dancakers, Andreas M
REGISTRATION NUMBER: 32652
REFERENCE/DOCKET NUMBER: 4952.US.01
TELEPHONE: 708-937-9396
TELEFAX: 708-938-2623
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 3567 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-642-734C-4

Query Match 1.7%; Score 106.5; DB 2; Length 3567;

Best Local Similarity 19.9%; Pred. No. 7.4; Indels 465; Gaps 62;
Matches 237; Conservative 104; Mismatches 384;

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QY 125 CQGPVVDGAVETTGAE--ICTR-----LGLEPENTILYLVVTFALFKBAVMCNVFLH 174
DB 1165 CPQDLLAAVEEAGASAVVCAQDAALREALGDEP-----VTAL-----VH 1205
QY 175 YGGLDVIHNGDVIRIPLFPVQLFMPDVNRLVPDPENTHESIGBGFVYTPFYNTGLC 234
DB 1206 AGTL--TNFG-----SISEVAPEEF-----AETIAKTALL 1234
QY 235 HLHDCVIAAPMAVALRV-----RNVTVAVARGAHL-AFDENHEGAVLPDITVT 282
DB 1235 AVL-DEVLDGRAVEREVCSSVAGIWWGGAGMAAAYAGSAYLDALAEHHR----- 1282
QY 283 YFQSSSGTTRTARGARRNDVNSTKPSPG-----GF--ERRLASIMAAADTALHA-EVIFN 335
DB 1283 -----ARGRSCTSVAMTPWALPGGAVDDGYLREGLRS-LSDRAMRTVERVLA 1330
QY 336 TGIYBETPTDIKEWPMFI-GMEGTLPRLNALGSYTRAVAGVIGAMVFSNSALYLTVEVD 394
DB 1331 AGPVSVAADV-DWVLSSEGPATRP-----TALFAELAGR 1365
QY 395 SGMTEAKDGGPGPSNRRFYQFAG-----PHLANPQTDROGHVLSSTGSSNTE 444
DB 1366 GGOAEAEAPDS-GPTGEPAQRLAGLSPDEQENLLELVANAVAE---VLGHESAABINVR 1420
QY 445 FSDVYLALICGFGAPLLARLLFLYERCDAGAFGGHGDALKVYTGTFDSEIPCSLCEKHT 504
DB 1421 RAFSELGLDSLNAALRKLL-----SASTG-----LLEPASL----- 1452
QY 505 RPYCAHTTVHRLRQ--RMPRFGQATROPIGVFGTMNSQYSDCDPL-----GNVA 551

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Db 1453 --VFDHPTVTLAQHLRLARLVGDADQAAVAVVGAAD-----ESEPFAIVGICRPPGGIGS 1506
 QY 552 PYLILR-----KPGDQTEAA-----566
 Db 1507 PQLMRVLAEGANLITGPPADRGWDIGRLYHPPDPNPGTSYVDKGGFLTDRAADPDGFFG 1566
 QY 567 -----KATMDQTYRATLERFLDLQERLLDRGAPCSSEGLSSVVDHPTFR 614
 Db 1567 ITPREALAMPQOORLMLETAWAVERAGIDPDALRGTDGTGVFGMNGQSYMQLLAGEAER 1626
 QY 615 I-----LDTLRARIEQT-----TTQFMKVLVETRDYKIREGLSEATHSMAL 655
 Db 1627 VDGQGLGNSASVLSGRATYFEGEGPALVTDTACSSSLVGI--HLAQALRGECSLAL 1684
 QY 656 T-----FDPYGAFCPTINFLVKTTHLAVQDIALSOCHCVFVQGVQVEGRNFRN-----704
 Db 1685 AGGVTVMSDPYT-----FVDFSTQR-----GLA-SDGRCKAFSARADGFALSEGVAAL 1731
 QY 705 QFQVLRERFVDLFGNGGFISTRSIITVLTSEGGPVSAENPTLGQDAPAG-----RTFDGDLAR 760
 Db 1732 VLEPLSRAR-----ANG-----HQVLAVLRGSANVQDQASGLAALPNPSPSERVIRQALAA 1782
 QY 761 VSVVIRDIRVKNRVVFGNCTNLSAAARLVLGLASAYQREKR-----VDMXLH--810
 Db 1783 SGVPA-ADVDV---VEAHGTGTGLCDPTIAG--ALAIATYGGDRDRPLRLGSKVKTNIHTQ 1836
 QY 811 -----GALGFLKQFHGLLPRGNPKNSKPNPQFWLLORNQMPADKLTHEEITIA 864
 Db 1837 AAAGAAGVKKVLAWRHGL-PRSLHADELSPHIDM-----ESGAVEVLEEVFWPA 1887
 QY 865 AVKRTFETBYAALFINLPPTCIGLAQFYMANILKYCDHSQYLINTLTSITGARRPRD 924
 Db 1888 GER---PRRAGVSSPGVSGT-----NAHVIVEAPAEQ-----EAARTERG 1925
 QY 925 PSSVLHWLRKDVTSAADETOKALKETENLPEL-----WITAFSTHL-VRAAMNQR 977
 Db 1926 PLPFLVLSGRSAVAA-----QARALAEHLRDTPELGTDRATLTGARGFVRAAV---1978
 QY 978 PMVLGISISKYHGAAGNNRVFQAGNWSGLNGKXNVCPLFTFDRTRFIIACPRGGFICP 1037
 Db 1979 -----LGDDRAGVCAELDAAEGR-----PSADAVAP 2005
 QY 1038 VTGSSGNRETTLSQVGRGIIVSGAMVQLAIYATVAVGARAQHWAFDMLSLTDDF 1097
 Db 2006 VT---SAPRKVL-----VFGQGAQ-----WVG-----2026
 QY 1098 LARLEELHDIQTL-----ETPWTVEGALEAVKILDEKTTAGDG 1138
 Db 2027 MARDLLESSEVFASMSRCAELSPHTDW-----KLDD--VVRGDG 2065

RESULT 14
 US-08-439-009A-4
 ; Sequence 4, Application US/08439009A
 ; Patent No. 6004787
 ; GENERAL INFORMATION:
 ; APPLICANT: Donadio, S
 ; APPLICANT: Katz, L
 ; APPLICANT: Mcalpine, J B
 ; TITLE OF INVENTION: Method of Directing Biosynthesis of
 ; TITLE OF INVENTION: Specific Polyketides
 ; NUMBER OF SEQUENCES: 27
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Steven F. Weinstein
 ; STREET: Abbott Laboratories D377/AP6D-2 One Abbott
 ; STREET: Park Rd
 ; CITY: Abbott Park
 ; STATE: IL
 ; COUNTRY: US
 ; ZIP: 60064-3500
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA: US/08/439,009A
 APPLICATION NUMBER: US/08/439,009A
 FILING DATE: 11-MAY-1995
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Casuto, Dianne
 REGISTRATION NUMBER: 40,943
 REFERENCE/DOCKET NUMBER: 4952.US.D1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 847-938-3137
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 3567 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-439-009A-4

Query Match 1.7%; Score 106.5; DB 3; Length 3567;
 Best Local Similarity 19.9%; Pred. No. 7.4;
 Matches 237; Conservative 104; Mismatches 384; Indels 465; Gaps 62;

QY 125 CQPPVVDGAVETTCAB--ICTR-----LGLPEPNTILYVVTALFKEAVFMCNVLH 174
 Db 1165 CPDDLLAAVEEAGASAVCAQAAALREALGDEP-----VTAL-----VH 1205
 QY 175 YGSLDIHINHGDVIRPLPPVQFMVDNVLVPDPFNTHRSIGEGVYVPTFPYNTGLC 234
 Db 1206 AGTL-----TNFG-----SISEVAPESEF-----AETIAAKTALL 1234
 QY 235 HLHDCVLIAPMAVALRV-----RNVTVAVASGAHL-AFDENHEGAVLPDPTIT 282
 Db 1235 AVL-DEVLGDRVVEREYVCSVAGIKGGAGMAAAYAGSAYDLALAEHR-----1282
 QY 283 YFQSSSGTTTARGARNVDNNTSKPSG-----GF--ERRLASIMAAATLHA-EVIFN 335
 Db 1283 -----ARGRSCTSVANTPWALPGGAVDDGYLRERGLRS-LSADRAMEWTWVLA 1330
 QY 336 TGIYEETPTDIKEMPEI-GMEGTLPRLNALGYSYARVAGVIGAMVSPNSALYLTEVD 394
 Db 1331 AGPVSAVADV-DWFLVSEGFATRP-----TALFABLAGR 1365
 QY 395 SGMTAKDGGGSPFNRYQFAG-----PHLAANPQTDTRDGHVLSSTGSSNTE 444
 Db 1366 GGQAEAPDS-GPTGEPAQRLAGLSPEQOENLELVANAVAE-----VLGHESAAEINVR 1420
 QY 445 FSDVYDALICGFGAPILARLLFYLERCDAGAFGGHGDALKYVTGTFDSEIPCSCKEHT 504
 Db 1421 RPFELGLDSINAMAKRL-----SASTG-----LRLPASL-----1452
 QY 505 RPVCATTVHRLRQ--RMPRFGQATROPIGVFGTMNSQYSDCDPL-----GNYA 551
 Db 1453 --VFDHPTVTLAQHLRLARLVGDADQAAVAVVGAAD-----ESEPFAIVGICRPPGGIGS 1506
 QY 552 PYLILR-----KPGDQTEAA-----566
 Db 1507 PQLMRVLAEGANLITGPPADRGWDIGRLYHPPDPNPGTSYVDKGGFLTDRAADPDGFFG 1566
 QY 567 -----KATMDQTYRATLERFLDLQERLLDRGAPCSSEGLSSVVDHPTFR 614
 Db 1567 ITPREALAMPQOORLMLETAWAVERAGIDPDALRGTDGTGVFGMNGQSYMQLLAGEAER 1626
 QY 615 I-----LDTLRARIEQT-----TTQFMKVLVETRDYKIREGLSEATHSMAL 655
 Db 1627 VDGQGLGNSASVLSGRATYFEGEGPALVTDTACSSSLVGI--HLAQALRGECSLAL 1684
 QY 656 T-----FDPYGAFCPTINFLVKTTHLAVQDIALSOCHCVFVQGVQVEGRNFRN-----704
 Db 1685 AGGVTVMSDPYT-----FVDFSTQR-----GLA-SDGRCKAFSARADGFALSEGVAAL 1731
 QY 705 QFQVLRERFVDLFGNGGFISTRSIITVLTSEGGPVSAENPTLGQDAPAG-----RTFDGDLAR 760

Db 1732 VLEPLSRAR-----ANG-----HQVLAVLRGSVAVNQDASNGLAAPNGPSOERVIRQALAA 1782
Qy 761 VSEVIRDIRVKNRVVPSGNTLSEAAARLVGLASAYQORQKR-----VDMHLH-- 810
Db 1783 SGVPA-ADVIV---VEAHGTGTELGDPIEAG--ALIAITYGQDRDRPLRLGSGVKNIGHTQ 1836
Qy 811 -----GALGFLKQFGLLFPROMPNPSKPNQFWTLQKQNPADKLTHEEITTTIA 864
Db 1837 AAGAAGVIVKVLAVRHGML-PSLHADELSPHIDW-----ESGAEVLEEEVWPWA 1887
Qy 865 AVKFTTEYRAINFILPPTTCIGELAQFYMANLILKYCDHSQVYLNTLTSITGASRPRD 924
Db 1888 GER---PRACVSGFVSGT-----NAHVIVEEAPAEQ-----EAARTERG 1925
Qy 925 PSSVLHWIRKDVTSAAIDETQAKALLEKTENLPEL-----WTTAFTSTHL-VRAANNQR 977
Db 1926 PLPVLGSRSEAVVAA-----CARALAEHLRDTPELGLTDAWTILATGRARFVRAAV-- 1978
Qy 978 PMVVLGISISIKYHGAAGNNRVFOAGNWSGLNGKNCVCELTFTFDETRFIACPRGGFICP 1037
Db 1979 -----LGDRAVCAELDALAEBR-----PSADAVAP 2005
Qy 1038 VTPSSGNNRETTLSQVRGIIVSGGAMVQLAIYATVVRVAVGARAQHMAFDWLSLTDDDEF 1097
Db 2006 VT---SAPRKPVL-----VFPQGGAQ-----WVG----- 2026
Qy 1098 LARLEELHDDIOTL-----ETPWTVEGALEAVKIDETKTAGDG 1138
Db 2027 MARDLLESSEVFAESMSRCAEALSPTHIDW-----KLLD--VVRGDG 2065

RESULT 15
US-07-731-157A-7
; Sequence 7, Application US/07731157A
; Patent No. 5457032
; GENERAL INFORMATION:
; APPLICANT: Quax, Wilhelmus J.
; APPLICANT: Misset, Onno
; APPLICANT: Van der Laan, Jan M.
; APPLICANT: Lenting, Herman B.M.
; TITLE OF INVENTION: Mutated beta-lactam acylase genes
; NUMBER OF SEQUENCES: 50
; CORRESPONDENCE ADDRESS:
; ADDRESSER: COLEY GODWARD CASTRO HUDDLESON & TATUM
; STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/731,157A
; FILING DATE: 19910509
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 90200962
; FILING DATE: 18-APR-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: RAE-VENTER PH.D., BARBARA
; REGISTRATION NUMBER: 32,750
; REFERENCE/DOCKET NUMBER: GBRO-027/0005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-494-7622
; TELEFAX: 415-857-0663
; TELEX: 380816 COOLEY PA
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 774 amino acids

; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
; ORGANISM: Pseudomonas species
; STRAIN: SE83
; US-07-731-157A-7
Query Match 1.7%; Score 106; DB 1; Length 774;
Best Local Similarity 20.2%; Pred. No. 0.47;
Matches 145; Conservative 79; Mismatches 251; Indels 242; Gaps 37;
Qy 258 ARGAAHLAFDENHGAVALPPDITVTFQSSSGTTRTARGARNNDVNSTSKPSPSGGFER 316
Db 183 AANALKLIRVDDGQDLICIPFGVEARELEADLAARPAVDALLKAMGGDASDAAGGSNN 242
Qy 317 -----RLAS-----INAAATLHAARVIFNNGIYEETPTDIKEMPMFIGHEGTPLRLNALGS 367
Db 243 WAVAPGRTATGPILAGDPHRVFEI---PGMYAQHLCACDRFDM-IGL--TVP----- 289
Qy 368 YTAARVAGVIGAMVSPNSA-----LYLVEVEDSGMTE----- 399
Db 290 -----GVPGFPHFAHNGKVAICVTHAFMDIHLVLEQFAEDGRTARFGNEPEFVANRDR 343
Qy 400 --AKOGGPGPSNRFYQFAGPHLAANPQTRDRGHVLSQSSTGSSNTFESVDYLALICGFG 457
Db 344 RIARVGGADREFDIVETREHGPVIAGDP---LEGAALTLRSVQFAETDLSDFDCLTRMP--G 398
Qy 458 APLAALLFYLERCDAGATG--GH-----GDALKYVTGTFDSEIICSLCEKHTRPVCAET 511
Db 399 ASTVAQLY-----DATRGWGLIDHNLVAGDVAGSIGHLVRAVRPSRPRENGWLPVPGWS 452
Qy 512 TVHLRL-----QRMPRFQATROPIGVFGTMNSQY-----SDCDPLGNYPY--- 553
Db 453 GEHEWKGWIPHEAMPR---VIDPPGGLIVTANNRVVADDDHDPDYLCTDCHP-----PYRAE 504
Qy 554 ----LILRKPQDQTEAAKATMQDT-----YRATLERLFI--DLQEEL----- 590
Db 505 RIMERLVASPAFAVDDAAAHADTLSPHVGLLRARLEALGIGQSLPAEELRQTLIAWDGR 564
Qy 591 LDREGAPCSSEGLSSVIVDPTFRRIIDTLRARIEQTTTFMKVLVETRDYKIREGLSEA- 649
Db 565 MDAGSQAASA-----YNAFRAL-----TRLVTARSGLEQAI 596
Qy 650 THSMALT---FDYPGAFCPITNFLVKRTHLAVVQ---DLALSQCHCVFYGOQVGRNF 702
Db 597 AHPFAAVPPGVSPQGVWMAVPT--LLRND DAGMLKGSWDEALSEALSV-ATQNLATGRGW 654
Qy 703 RNQFQVLRFRFVDFLFGGFISTRITVILSEGPVAP-----NPTLGODAP 749
Db 655 GEEHRP-----RFTHPLSAQPPAWAALL-----NPVSRPIGGDGTVLANGLVPSAGPEAT 705
Qy 750 AGRTFDGDLARVSVEVIRDIRVKNRVVFS--GNCNTLSEAAARLVGLASAYQORQKRVDM 808
Db 706 YG-----ALSRYVFDVGNWDN-----SRWVV 726
Qy 809 LHGALGFLKQFGLLFPROMPNPSKPNQW-----FWTLLORNQMPADKLTHEEI 860
Db 727 FHGASG-----HPASPHYADQAPWSDCAMVPMYLSWDRIRAAEAVTSEQL 771

RESULT 16
US-08-541-780-7
; Sequence 7, Application US/08541780
; Patent No. 5935831
; GENERAL INFORMATION:
; APPLICANT: Quax, Wilhelmus J.
; APPLICANT: Misset, Onno
; APPLICANT: Van der Laan, Jan M.
; APPLICANT: Lenting, Herman B.M.
; TITLE OF INVENTION: Mutated beta-lactam acylase genes
; NUMBER OF SEQUENCES: 50

CORRESPONDENCE ADDRESS:
ADDRESSEE: COOLEY GODWARD CASTRO HUDDLESON & TATUM
STREET: FIVE PALO ALTO SQUARE, 4TH FLOOR
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent in Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/541,780
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/731,157
FILING DATE:
APPLICATION NUMBER: EP 90200962
FILING DATE: 18-APR-1990
ATTORNEY/AGENT INFORMATION:
NAME: RAE-VENTER PH.D., BARBARA
REGISTRATION NUMBER: 32,750
REFERENCE/DOCKET NUMBER: GBRO-027/0005
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-494-7622
TELEFAX: 415-857-0663
TELEX: 390816 COOLEY PA
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 774 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Pseudomonas species
STRAIN: SE83
US-08-541-780-7

Query Match 1.7%; Score 106; DB 2; Length 774;
Best Local Similarity 20.2%; Pred. No. 0.47;
Matches 145; Conservative 79; Mismatches 251; Indels 242; Gaps 37;
QY 258 ARGAAHLADENEGAV-LPPDITYTFFOSSSGTTTARGARRDNVNSTKSPSGGPER 316
DB 183 AANALKRVDGGDLCIPGVEARLEADLALRPVADALLKAMGGDASDAAGGSNN 242
QY 317 -----RLAS---IMAAATLALAEVITGTYEETPTDIKEWPMFTMGEGTLPRNALGS 367
DB 243 WAVAPGRTATGRFILAGDPHRVFEI---PGVYQAHHLACDRFDM-IGL--TVP----- 289
QY 368 YVARVAGVICAMVSPNSA-----LVLTEVEDSGMTE----- 399
DB 290 -----GVPGFPHFANGKVKVYCVTHAFMDIHLYLEQFAEDQRTARFNGEPFVAMRRD 343
QY 400 --AKDGGPSPFNRFQFAGPHLAANPQTRDGHVLSQSSTSSNTFSDVYALICGFG 457
DB 344 RIAVGGADREFDIVETRHGCPVIAGDP---LEGAALTLSVQPAETDLSFDCLTRMP--G 398
QY 458 APILLARLLFVLEKCDAGFTG--GH-----GDALKYVTGTFDSEIPSLCEKTRPVCAHT 511
DB 399 ASTVAQLY-----DATRGWGLIDHNLVAGDVAAGSIGHLVRAVPSPRPNGLVPVPGWS 452
QY 512 TVHRLR-----QRMPRFGQATROPIGVFGTMNSQY-----SDCDPLGNVAPY--- 553
DB 453 GEHEWRGWIPHEAMPR---VIDPPGGLIVTANNRVVADDDHPDYLCTDCHP-----PYRAE 504
QY 554 -----LILRKPGDQTEAAKATMQT-----YATLERLFI--DLQERL----- 590
DB 505 RIMERLVASPAFVDDAAAHAHTLSPHVGLLRARLEALGIQGLSPAEELRQTLIANDGR 564

QY 591 LDRGAPCSSEGLSSVIVDHTFFRILDTLRARIEQTTTQFMKVLVETRDYKIREGLSEA- 649
DB 565 MDAGSQAAASA-----YNAPFRAL-----TRLVTARSGLEQAI 596
QY 650 THSMALT---PDPYSGAFCEITNFLVKRTHLAVVQ---DLALSQCHCVFYGQOQVEGRNF 702
DB 597 AHFAAAPPVPGVSPQGVWAVPT-LLRNDGAGMLKGMWDSEALSV-ATQNLTRGWW 654
QY 703 RNQFQVLRFRFVDLFGGFISTRSITVTLSGPPVSAP-----NPTLGDQAP 749
DB 655 GEEHRP---RFTPLSAQFPAAWALL-----NPVSRPIGGDGTVLANGLVPSAGEPT 705
QY 750 AGRTFDGDLARVSVEVIRDIRVKNRVVFS-GNCTNLSEAAARLVGLASAYQOQEKRVDM 808
DB 706 YG-----ALSRYVDFGVNDN-----SRVVV 726
QY 809 LHGALGFLKQFHGLLPPRGMPNPSKSPNQW-----FWTLORNQMPAKLTHEEI 860
DB 727 FHGASG-----HPASPHYADQNAFMSDCAMVPMYSDWDRITAAEAVTSQEL 771
RESULT 17
US-09-107-532A-3855
; Sequence 3855, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 3855:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1095 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ORIGINAL SOURCE:
; ORGANISM: Enterococcus faecium
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (S) LOCATION 1...1095
; SEQUENCE DESCRIPTION: SEQ ID NO: 3855:
US-09-107-532A-3855

Query Match

1.7%; Score 105.5; DB 4; Length 1095;

Best Local Similarity 18.9%; Pred. No. 1;
Matches 145; Conservative 112; Mismatches 298; Indels 211; Gaps 35;
QY 551 APYLILKPGDQTAARAKATMDQTVATLRLFLIDLEQLRLDRGAPCSSEGLS-----S 604
Db 360 APYIDTPTMTTITKAGETIVTSKNAQKGOILDKSG-VETGSDLWNDNYSLAGNTFA 418
QY 605 VIVDHPTRRLD-TLRRARIBQTTQFMKVLIVETRDYKIREGLSEATHSMALFDP---- 659
Db 419 IRKDSPTGEIIVQEMTTDENGHAETPKETANALELGTYYVIE--TKASHGFNTFKPKVKE 476
QY 660 --YSGAFPCPIINFLVWRTHLAVQDLAL-----SQHCVFYGOQV-----EGR- 700
Db 477 LKYANQTVALTSTVSKNGQNEVGETTILTKEDKDTGDKAQKAVFEGTEYTLFTAKDGKA 536
QY 701 -NERNQFQVLRRLRRFVDFLFGSGFTSTRSITVTLSGEPVSAP-----NPTLQD--APAGR 752
Db 537 VKNSEAFK-----ENVKTKASDETVIALDEKQAAVKHLAINEYTWQSTKAPEGY 589
QY 753 TFDGLARVSVE-----VIRDIRVQRVV-----FSGNCTNLSEAA----- 788
Db 590 TLDKTYKPVSIKKVDDNEKNAVITRDVTAKEQIIRFGDFPKFAGSAAGTAETGENDLTF 649
QY 789 -RARIVLGLASAYQKQKXVDMHGLGF-----LLKQFHGLLFRGM----- 829
Db 650 KVSFLEGTNEITGADEATTATNAYQLGFDGYGKFNLPYGDYLLEVEA---PEGFOKIT 706
QY 830 PPNSKSP-----NPOWFMTLLORNO-----MPADKLTHEBITTIAAVKRFTEE 872
Db 707 PLEIRSTFKENKEDPVKSEYVFTITEQDQKQPIKTIVPYEKLIN-----KASVS 757
QY 873 YAAINFILNP--PTCIGELAQFYMANLILKYCHDSQVILNTLSITIGARRPRDPSSVLH 930
Db 758 LNRLMYLDPEDSLTSLATWKGDKNKLSTLSDSTE-LVDKL-----SYNLH 803
QY 931 WIKRD---VTSAAIDETQAKLLEKTENLPALTATFTSTHLVRAAMN---QRPVV-- 980
Db 804 EIKEDWYVVAQIDVDA--TKAAQKDEKAKEV-VIAETSATLANKEKTGTWKIOHKLTA 861
QY 981 -VLGISIKYHGAAGNRRVFOAGNWSGLNGKNCPLFTEDTRRRFTIACPRGFGICPVT 1039
Db 862 QVLNKTIVLFNVVYENKEAFEGD-----KQVA 889
QY 1040 GPSSGNRETTLSQVRGIIVSGGAMVQLAIYATVVRVAGARQAHAFDDWLSLTDDEFLA 1099
Db 890 -----KDVSLNNOAQTVSCTVEHVSITQKHAHLNG-----SQTFTGHDVVDMPDVSIT 939
QY 1100 RDL---BELHQIQTLETPWTEGALAEVKILDE-----XTT-----AGDGETPTNL 1144
Db 940 HDVLGSKAEFETILYALLPGTTHKEIWKSGIKIYEVNDKEFTTIVLAKKVDYTKYPEGT 999
QY 1145 APNFDSCPSHDTTNS-----VLNISGNSIGSTVPGKLRPPEDDE 1185
Db 1000 KFTFAEINVDKGTINGKHNDLKEKSQTLAPKEVPTILSTPKOPE 1045

RESULT 18

US-08-633-760-46
; Sequence 46, Application US/08633760
; Patent No. 5804429
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINEO
; APPLICANT: SAITO, YOSHIMASA
; APPLICANT: FUJIMURA, TAKAO
; APPLICANT: ISHII, YOSHINORI
; APPLICANT: NOGUCHI, YUJI
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 JEFFERSON DAVIS HIGHWAY, SUITE 400
; CITY: ARLINGTON

STATE: VIRGINIA
COUNTRY: USA
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/633,760
FILING DATE: 01-MAY-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 18-929-0 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 774 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-633-760-46
Query Match 1.7%; Score 105; DB 1; Length 774;
Best Local Similarity 20.7%; Pred. No. 0.6;
Matches 146; Conservative 76; Mismatches 241; Indels 242; Gaps 37;
QY 109 LTR--ACNAARERFGRSQGPPVGVGAVTTGAB-ICTR-----LGLEPENTILYLVVTAL 161
Db 70 LTRRKALGAAEWLWGL---AEEAEEADILVRRLGKVKCRDRDFEALGYEAKD-----M 117
QY 162 FKEAVPMCVNLFHYGLDIVHINHGVDVIRIPFPVQLFMPDVNRLVPDPFNTH-----R 216
Db 118 LRAYAGVNAFLASGA-----PL-PVEYGLLGA---PEPWEPHSIAVMR 159
QY 217 SIGEGFVYPTFPYNTGLCHLIHDCVIAPMVALRVNVTAV-----ARGAAHLAFDENHEG 272
Db 160 RLQ-----LLMGAVNFKLWRMLALPVVGAANALKRLYDDGGRD 197
QY 273 AV-LPPDITYTYFQSSSGTTTARGARRNDVNSTKPSPSGGER-----RLAS---IM 322
Db 198 LILCIPGABADRLADLATLRPAVDALLKAMGGDASDAAGGNNWAVAPGTATGRPIL 257
QY 323 AADTALRAEVIENTGTYEETPTDIKEWPMFIGMEGTLPRLNALGSYTARVAGVIGAMVFS 382
Db 258 AGDPHRVFEI---PGWYACHLLACORFDM-IGL--TVP-----GVGFPPEHA 298
QY 383 PMSA-----LYLVEDESGMTE-----AKDGGGSPSNRF 412
Db 299 HNGKVAYCVTHAFMDIHDLYLEQFAGEGRTARFGNDPEFVAVMSRDRIVRGGADEFDIV 358
QY 413 YQFAGPHLAANPQTRDRDGHVLSQSSTGSSNTFFSDVYLLALICGFGAPLLARLLFYLERCD 472
Db 359 ETRHGPIVAGDP---RDGAULTRSVQFAETDLSFCLTRMP--GASTVAQLY-----D 407
QY 473 AGAFTG--GH-----GDALKYVTGTDFSEIPCSLCEKHTPVCATHTVHRLR-----QRMP 521
Db 408 ATRGWLIDHNLVAGDVAGSIGHLVRAVPSRPRENGMLPVPGWSGEHEWRGWIPEAMP 467
QY 522 RFQATRTQPIGVGTNNSQY-----SCDPLGNVAPY-----LILRKPDQDTE 564
Db 468 R---VTDPPGGIIVTANNRVADDDHDDYLCCTCHP-----PYRAERIMKRLVANPAFVD 519
QY 565 AAKATMQDTYRATLERLFDLQERLLDRGA--PCSSGLSSVIV-----D 608
Db 520 DAAAIHADTLSP-----HVGLLRRLLEALGARDSDSAEGLRQMLVAVDGMDDAASEVASA 574
QY 609 HPTFRRLDTL---RARIEQTTQ-----FMKVLVETRDYKIREG--- 645

Db 575 YNAFRALRLVTDRLSGLQAISHPPAAVAPGVSPQGVVWAVPTLLRDDDDAGMLKGWSW 634
QY 646 ---LSEA-----THSMALTFDPYSGAFCP 666
Db 635 DOALSEALSASQNLTRGSRGSEHPRFTHTPLATOFFPAWAGLNP 679

RESULT 19
US-08-633-760-48
; Sequence 48, Application US/08633760
; Patent No. 5804429
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINBO
; APPLICANT: SAITO, YOSHIMASA
; APPLICANT: FUJIMURA, TAKAO
; APPLICANT: ISHII, YOSHINORI
; APPLICANT: NOGUCHI, YUJI
; NUMBER OF SEQUENCES: 64
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MATIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 JEFFERSON DAVIS HIGHWAY, SUITE 400
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/633,760
; FILING DATE: 01-MAY-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 18-929-0 PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OFAT UR
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 774 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-633-760-48

Query Match 1.7%; Score 105; DB 1; Length 774;
Best Local Similarity 20.7%; Pred.No. 0.6;
Matches 146; Conservative 76; Mismatches 241; Indels 242; Gaps 37;

QY 109 LTR--ACNAARERFGSRGCGPPDVGAVTTGAE-ICTR-----LGLPEPTLYLVVLTAL 161
Db 70 LTRRKALGAAEWLGL---AFAAEADILVRLLGMEKVCRRDFEALGYEAKD-----M 117
QY 162 FKEAVFMCNVFLHYGLDVIHNGDVIRIPLFPVQLFMPDVNRLVPDPFNTH-----R 216
Db 118 LRAYVAGVNAFLASGA-----PL-PVEYGLLGAEE---PEPEWPHSIAVNR 159
QY 217 STIGEGFVYPTFPFNTGLCHLHDCVAPMAVALRVNVTAV-----ARGAAHLAFDENHEG 272
Db 160 RLQ-----LLMGSVNFKLWRMLALPVVGAANALKRLRYDDGGDR 197
QY 273 AV-LPPDITYTYFQSSSGTTTARGARRNDVNSTKSPSPGGFER-----RLAS---IM 322
Db 198 LICIPGAZADRLLEADLALTRPAVDALLKAMGSDASDAAGGSNNWAVAPGRTAIGRPIL 257

QY 323 AADTALHAEVIENTGIYEETPTDIKEWPMFIMGEGTLPLRLNALGYSYARVAGVIGAMVFS 382
Db 258 AGDHRVFEI---PGIYAQHHLACDRFDM-IGL--TVP-----GVPGFPHFA 298
QY 383 PNSA-----LYLTVESGSGMTE-----AKDGGPGPSPNRNF 412
Db 299 HNGKVAYCVTHAFMDIHDLYLEQFAGEGRFARFGNDPEPVAWSRDRITAVRGGAADREFDIV 358
QY 413 YQFAGPHLAANPQDTRDGHVLSQSGTSNTSPESVDYLALICGAPLALLARLLFYLRSCD 472
Db 359 KTRHGPVIAGDP---RDGAALTILRSVQFATDILSFDCLTRMP--GASTVAQLY-----D 407
QY 473 AGAFTG--GH-----GDALKYVTGTDFSEIFCSICEKHTREVCATHTVHRLR-----QRMP 521
Db 408 ATRGWGLIDHNLVAGDVAGSIGHLVRAVRPSRPRENGMLPVPGWSGEHEWRGWIPEAMP 467
QY 522 RFGQATROPICVPCTMNSQV-----SDCDPLGNVAPY-----LILRPGQOTE 564
Db 468 R---VIDPPGGIIVTANNRVVADDDHDPYLCTDCHP-----PYRAERIMKRLVANPAFVD 519
QY 565 AAKATMODTYRATLERLFDLEQERLIDRGA--PCSESEGLSSVIV-----D 608
Db 520 DAAAIHADTLSP-----HVGLLRRRLREALGARDDSAAEGLRQMLVAMWGRMDAAASEVASA 574
QY 609 HPTFRRIIDTL---RARIQTTTQ-----FMKVLVETRDYKIREG--- 645
Db 575 YNAFRALRLVTDRLSGLQAISHPPAAVAPGVSPQGVVWAVPTLLRDDDDAGMLKGWSW 634
QY 646 ---LSEA-----THSMALTFDPYSGAFCP 666
Db 635 DOALSEALSASQNLTRGSRGSEHPRFTHTPLATOFFPAWAGLNP 679

RESULT 20
US-08-931-608A-5
; Sequence 5, Application US/08931608A
; Patent No. 6302685
; GENERAL INFORMATION:
; APPLICANT: Lobel, Peter
; APPLICANT: Sleat, David B.
; TITLE OF INVENTION: NOVEL HUMAN LYSOSOMAL PROTEIN AND METHODS OF ITS USE
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David A. Jackson, Esq.
; STREET: 411 Hackensack Ave, Continental Plaza, 4th Floor
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/931,608A
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 601-1-077
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 635 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO

US-08-931-608A-5

Query Match 1.7%; Score 104.5; DB 4; Length 635;
Best Local Similarity 21.0%; Pred. No. 0.47;
Matches 77; Conservative 36; Mismatches 121; Indels 133; Gaps 14;

QY 245 MAVALRVNTAVARGAAHLAFDENH-EGAVLPDPDITYTFQSSSSGTTTARGARNVDVN 303
DB 10 VAIALAMSSLSAHD-----AWVSTHTQAAMSPASTQVLAASSTATTGNA---YTLN 62

QY 304 STKSPSGGFFERRLASIMAADTALHAEVFNFTGIYEETPTDIKEMPMFIGMEGLPRLN 363
DB 63 MTGSPRIDGA-----AVTALEADHPLHVEALK-----LRNPD 95

QY 364 ALGYSYARVAGVIGAMVSPNSALYLTEVEDSGMTEAKDGGPGSPFNRFYQFAGPHLAAN 423
DB 96 ALQTFLAGVT-----TPGSALFGKFLTPSQFTE-----RF-----GP----- 127

QY 424 POTDRDGHVLSQSTGSSNTEFSVDYLALICGFGAPLLARLLFYLERCDAGATGCHGDA 483
DB 128 TQSQVDVAVAHLQQAQFTNIEVAPNRL-LISADGT-----AGAATNGFRTS 172

QY 484 LKVVYTGTFDSEIPCSLCEKHTRPVCAHTTVHRLRQRMFRFGQATROPIGVFGTMNSQYSD 543
DB 173 IK-----RFSANGR----- 181

QY 544 CDPLGNYAPYLILRKPGDQTEAAKATMDTYRATLERLFDLEQERLLDRGAPCSSEGLS 603
DB 182 -EFFANDAPALVPASIGDSVNAVGLQNVSKVHTLHHVY---HPEDVTVPGNVGTQAAA 237

QY 604 SVIVDHP 610
DB 238 AVAAHP 244

RESULT 21

US-09-851-847-5
; Sequence 5, Application US/09851847
; Patent No. 6638712
; GENERAL INFORMATION:
; APPLICANT: Lobel, Peter
; Sleaf, David E.
; TITLE OF INVENTION: NOVEL HUMAN LYOSOMAL PROTEIN AND METHODS OF ITS
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David A. Jackson, Esq.
; STREET: 411 Hackensack Ave, Continental Plaza, 4th Floor
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/851.847
; FILING DATE: 09-May-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/931,608
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 601-1-077
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:

LENGTH: 635 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-851-847-5

Query Match 1.7%; Score 104.5; DB 4; Length 635;
Best Local Similarity 21.0%; Pred. No. 0.47;
Matches 77; Conservative 36; Mismatches 121; Indels 133; Gaps 14;

QY 245 MAVALRVNTAVARGAAHLAFDENH-EGAVLPDPDITYTFQSSSSGTTTARGARNVDVN 303
DB 10 VAIALAMSSLSAHD-----AWVSTHTQAAMSPASTQVLAASSTATTGNA---YTLN 62

QY 304 STKSPSGGFFERRLASIMAADTALHAEVFNFTGIYEETPTDIKEMPMFIGMEGLPRLN 363
DB 63 MTGSPRIDGA-----AVTALEADHPLHVEALK-----LRNPD 95

QY 364 ALGYSYARVAGVIGAMVSPNSALYLTEVEDSGMTEAKDGGPGSPFNRFYQFAGPHLAAN 423
DB 96 ALQTFLAGVT-----TPGSALFGKFLTPSQFTE-----RF-----GP----- 127

QY 424 POTDRDGHVLSQSTGSSNTEFSVDYLALICGFGAPLLARLLFYLERCDAGATGCHGDA 483
DB 128 TQSQVDVAVAHLQQAQFTNIEVAPNRL-LISADGT-----AGAATNGFRTS 172

QY 484 LKVVYTGTFDSEIPCSLCEKHTRPVCAHTTVHRLRQRMFRFGQATROPIGVFGTMNSQYSD 543
DB 173 IK-----RFSANGR----- 181

QY 544 CDPLGNYAPYLILRKPGDQTEAAKATMDTYRATLERLFDLEQERLLDRGAPCSSEGLS 603
DB 182 -EFFANDAPALVPASIGDSVNAVGLQNVSKVHTLHHVY---HPEDVTVPGNVGTQAAA 237

QY 604 SVIVDHP 610
DB 238 AVAAHP 244

RESULT 22

US-08-019-870-5
; Sequence 5, Application US/08019870
; Patent No. 5336613
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINEO
; APPLICANT: YOSHIMASA, SAITO
; APPLICANT: SASAKI, HITOSHI
; APPLICANT: ISHII, YOSHINORI
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: P.C.
; ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,
; STREET: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/019,870
; FILING DATE: 19930219
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Oslon, No. 5336613man F.
; REGISTRATION NUMBER: 24,618

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
 ADDRESSEE: P.C.
 STREET: 1755 S. Jefferson Davis Highway, Suite 400
 CITY: Arlington
 STATE: Virginia
 COUNTRY: U.S.A.
 ZIP: 22202
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent in Release #1.0, Version #1.25
 CURRENT APPLICATION DATA: US/08/019,870
 APPLICATION NUMBER: US/08/019,870
 FILING DATE: 19930319
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Oblon, No. 5336613man F.
 REGISTRATION NUMBER: 24,618
 REFERENCE/DOCKET NUMBER: 18-791-0
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 413-3000
 TELEFAX: (703) 413-2220
 TELEX: 248855 OPAT UR
 INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 774 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-019-870-3

Query Match 1.6%; Score 103; DB 1; Length 774;
 Best Local Similarity 20.5%; Pred. No. 0.97;
 Matches 143; Conservative 80; Mismatches 248; Indels 226; Gaps 37;

QY 109 LTR--ACNAARERFGSRGCPVGDGAVETTGAB-ICTR----LGLPENTILYLVTAL 161
 DB 70 LTRKALGRAEWLG---AEAERADILVRLGMEKVCRRDFEALGVEAKD-----M 117
 QY 162 FKEAVFMCNVLHYGGDLIVHINHGDIPIPLFVQLFMPDVNRLVDPDPNTH-----R 216
 DB 118 LRAYVAGNAFLASGA-----PL-PVEYGLLGAE---PEPWEPHSIAMVR 159
 QY 217 SIGEGFYPTFPYNTGLCHLHDCVIAPMVALVRNVTAV---ARGAAHLAFDENHEG 272
 DB 160 RLG-----LMGWFVFLKRLMLALPVVGAANALKRYDDGGRD 197
 QY 273 AV-LPPDITYTFOSSSGTTTARGARRNDVNSTKPSGGFER-----IM 322
 DB 198 LLCIPPGAERDLADLATLRPAVDALLKAMGSDASDAAGGNNWAVAPGRTATGRPIL 257
 QY 323 AADTALHAEVIFNTGIYEETPTDIKEWPMFIGMGTLPLRNALGSIYARVAGVIGAMVES 382
 DB 258 AGDPHRVFEI---PGWAAQHHLACDRFDM-IGL---TPGVGPFPHFAHN-----GRVAYS 306
 QY 383 PNSA-----LYLTVEDSGMTE-----AKDGGPGSPNRFYQAFGPHL 420
 DB 307 VTHAFMDIHLVLEQFAGEGTARFNGDFEPVANSRDIARVGGADREFDIVETRHGPI 366
 QY 421 AANFQTRDGHVLSQSQTSSNTSFVDYLALICGFGAPLARLLFYLCRDACAGFTG-- 478
 DB 367 AGDP---RDGAALTILRSVQFAETDLSFDCLTRMP--GASTVAQLY-----DATRGNGLI 415
 QY 479 GH---GDALKVVTGTFDSEIPCSICEKHTRPVCAHTTVHRLR-----QRMPEFGQATRQ 529
 DB 416 DHNLVAGDVAGSIGHVLRARVPSPRENGWLPVPGWSEGEHWRGWIPIHEAMPR---VIDP 472
 QY 530 PIGVFGTMSQY-----SPCDPLGNVAPY-----LILRKPQGDQTEAKATQD 572
 DB 473 EGGIIVTANNRVADDDHFDLYLCTDCHP-----PYRAERIMKRLVANPAFAVDAAAIHAD 527
 QY 573 TYRATLERLFDLEQERLLDRGA--PCSSSEGLSSVIV-----DHTFEREIL 616

DB 528 TLSP-----HVGLLRRLEALGARDSDAEGRLQMLVANDGMDAAAEVAYNAFREAL 582
 QY 617 DTL---RARIEQTTTQ-----FMKVLVETRDYKIREG-----LSEA- 649
 DB 583 TRLVTRDSGLEAISHPEAAVAPGVSPQGVWAVPTLLRDDDAGMLKGWSWDQALSEAL 642
 QY 650 -----THSMALTDFDPSGAFCP 666
 DB 643 SVASQNLTRSGWGEHRPRFTHPLATQPPAWAGLLNP 679

RESULT 25
 US-08-633-760-44
 ; Sequence 44, Application US/08633760
 ; Patent No. 5804429
 ; GENERAL INFORMATION:
 ; APPLICANT: NIWA, MINEO
 ; APPLICANT: SAITO, YOSHIMASA
 ; APPLICANT: FUJIMURA, TAKAO
 ; APPLICANT: ISHII, YOSHINORI
 ; APPLICANT: NOGUCHI, YUJI
 ; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
 ; NUMBER OF SEQUENCES: 64
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
 ; STREET: 1755 JEFFERSON DAVIS HIGHWAY, SUITE 400
 ; CITY: ARLINGTON
 ; STATE: VIRGINIA
 ; COUNTRY: USA
 ; ZIP: 22202
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/633,760
 ; FILING DATE: 01-MAY-1996
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: OBLON, NORMAN F.
 ; REGISTRATION NUMBER: 24,618
 ; REFERENCE/DOCKET NUMBER: 18-929-0 PCT
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (703) 413-3000
 ; TELEFAX: (703) 413-2220
 ; TELEX: 248855 OPAT UR
 ; INFORMATION FOR SEQ ID NO: 44:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 774 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-633-760-44

Query Match 1.6%; Score 103; DB 1; Length 774;
 Best Local Similarity 20.6%; Pred. No. 0.97;
 Matches 145; Conservative 77; Mismatches 241; Indels 242; Gaps 37;

QY 109 LTR--ACNAARERFGSRGCPVGDGAVETTGAB-ICTR---LGLPENTILYLVTAL 161
 DB 70 LTRKALGRAEWLG---AEAERADILVRLGMEKVCRRDFEALGVEAKD-----M 117
 QY 162 FKEAVFMCNVLHYGGDLIVHINHGDIPIPLFVQLFMPDVNRLVDPDPNTH-----R 216
 DB 118 LRAYVAGNAFLASGA-----PL-PVEYGLLGAE---PEPWEPHSIAMVR 159
 QY 217 SIGEGFYPTFPYNTGLCHLHDCVIAPMVALVRNVTAV---ARGAAHLAFDENHEG 272
 DB 160 RLG-----LLAGSVWFLKRLMLALPVVGAANALKRYDDGGRD 197

```

273 AV-LPPDITYTYFQSSSGTTTARGARRNDVNSTKSPSPGGFER-----RLAS-----IM 322
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
198 LLCIPFGAEADRLADLATLPAVDALLKAMGGDASDAAGGSGNNWAVFGRATGRPL 257
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
323 AADTALHAEVIENTGYYEETTDIKENPMFTGMEGTLPRNLALGSYTARVAGVIGAWVFS 382
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
258 AGDPRHVFEEI-----PGNYAQHHLACDRFDM-IGL--TVP-----GVPGEHPFA 298
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
383 PNSA-----LYLTEVEDSGMTE-----AKDGPGSPSNRF 412
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
299 HNGKVAYCVTHAFMDIHDLYLEQFAGEGRTARFNDPEPVAWSRDRIAVRGGADREFDIV 358
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
413 YQFAGPHLAANTQTRDGHVLSQSTGSSNTEFSDVYALICFGGAPLLARLLFYLERCD 472
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
359 ETRHGEVVIAGDP--RDGAUUTLRSVQFAETDLSFDCLTRMP--GASTVAQLY-----D 407
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
473 AGAFTC--GH-----GDALKYVTGTFDSEIPCSLCEKTRFPVCAHTTVHRLR-----ORMP 521
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
408 ATRGWSGLIDHNLVAGDVAGSIGHLVRAPVSPRPENGWLPVPGWSGEHWRGWIPHEAMP 467
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
522 RFQOATRQPIGVFGTWNQY-----SDCDPLGNVAPY-----LILRKPGDQTE 564
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
468 R--VIDPPGGIIVTANNRVVADDDHPDYLCIDCHP-----PYRAERIMKELVANPAFVD 519
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
565 AAKATMQDTPYRATLEBELFIDLEQEERLLDRGA--PCSSEGLSSVIV-----D 608
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
520 DAAAIHADTLSP-----HVGLLRRRLREALGARDSDSAEGLRQMLVAMDGRMDAASEVASA 574
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
609 HPTFRRLIDTL--RARTIEQTTO-----FKKVLVETRDYKIREG--- 645
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
575 YNAFRREALTELVTDRSGUEQAIHSHPFAAVAGVSPQGVWVPTLRDDDAGNKLKGNW 634
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
646 ---LSEA-----THSMALTDFDPYSGAPC 666
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::
635 DQALSEALSVASQNLTRGSWGBEHRPRFTHPLATQFPWAGLLNP 679
      ::      ::      ::      ::      ::      ::      ::      ::      ::      ::

RESULT 26
US-09-408-020-4
; Sequence 4, Application US/09408020
; Patent No. 6632937
; GENERAL INFORMATION:
; APPLICANT: Swanson, Ronald V.
; APPLICANT: Feldman, Robert A.
; APPLICANT: Schlager, Christa
; TITLE OF INVENTION: NUCLEIC ACIDS AND PROTEINS FROM CENARCHAEUM SYMBIOSUM
; FILE OF INVENTION: DCOIP.002A
; CURRENT APPLICATION NUMBER: US/09/408,020
; CURRENT FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/102,294
; PRIOR FILING DATE: 1998-09-29
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 3472
; TYPE: PRT
; ORGANISM: Cenarchaeum symbiosum
US-09-408-020-4

```

RESULT 26

```

US-09-408-020-4
, Sequence 4, Application US/09408020
, Patent No. 6632937
, GENERAL INFORMATION:
, APPLICANT: Swanson, Ronald V.
, APPLICANT: Feldman, Robert A.
, APPLICANT: Schleper, Christa
, TITLE OF INVENTION: NUCLEIC ACIDS
, FILE REFERENCE: DCOBP.002A
, CURRENT APPLICATION NUMBER: US/09-
, CURRENT FILING DATE: 1999-09-29
, PRIOR APPLICATION NUMBER: 60/102,2
, PRIOR FILING DATE: 1999-09-29
, NUMBER OF SEQ ID NOS: 123
, SOFTWARE: FASTSEQ for Windows Vers
, SEQ ID NO 4
, LENGTH: 3472
, TYPE: PRT
, ORGANISM: Cenarchaeum symbiosum
US-09-408-020-4

```

	Query Match	1.6%;	Score 103;	DB 4;	Length 3472;
	Best Local Similarity	20.2%;	Pred.No.16;		
	Matches	98;	Conservative 51;	Mismatches 175;	Indels 160; Gaps 24;
QY	82	LTTGHHFYSPVFHGGKHLVSSAAPNLTRACNAARERFGPSRCQGPFVDGAVETTGAEE	141		
		:::::	:::::		
DB	928	LAVSGYAEPISLVF--GRHAVFGAAGGFPPSIGNATELVG--SIPNPTELDFTGLTLTGA--	981		
		:::::	:::::		
QY	142	CTRGLGLEPENTILVLVTALPKFAVMFCNVFLHY-----CGLDAVLIHNHGDIVRIPLFPV	196		
		:::::	:::::		
DB	982	----AFSDGIGTWLFSDGTCRVYPYSLNIFDIISSAAGPGFVIIVPVGVSDI-----	1029		
		:::::	:::::		
QY	197	QLFMFD--VNRLVPDPENTHRSIGEG-FVYPTPTYNGLCHLIHCDCVIAPMVALVRNV	254		
		:::::	:::::		

[illegible]

RESULT 27

US-08-070-165F-6
Sequence 6, Application US/08070165F
Patent No. 5750365
GENERAL INFORMATION:
APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ing-Ming Chiu
STREET: S2052 Davis Medical Research Center, 480 West
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
COUNTRY: USA
ZIP: 43210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/070,165F
FILING DATE:
CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
TELEFAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 729 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-070-165F-6

```

Query Match      1.6%; Score 102; DB 1; Length 729;
Best Local Similarity 20.0%; Pred. No. 1.1;
Matches 111; Conservative 69; Mismatches 206; Indels 168; Gaps 26;

QY 355 MEGTLPRNALGSGYTVARVAGVIGAWFSPNSALYLTVEDS-----GNTAEKDG 403
      |||:|||||::|:|:|:|
DB 128 MESVVP--SDRGNTYCIEMENEYGI-----NHTYHLVDVSPHRIQLQAGLPANTTTKVG 181
      |||:|||||::|:|:|:|

QY 404 GPGPSFNFFYQAFGPHL-----AANFQTRDRGH-----VLSSQSTGSSNTEFSDVLYAL 452

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Db 182 GDAEFVCKVSDAQPHQIWRHPELNGSKIGDPGHPYLVKLAAGVNTTDEIEVLYVRN 241
Qy 453 ICDFGAPLLARLLFYLERCDAGFT--GGHGDAKLYVTGTF-----DSEIPCS 498
Db 242 VS-----DAGEYTCAGNSTGISHYHTAWLTVLPDEERELDSSEYTEI 286
Qy 499 -----LCEKTRPVC-----AHTVHRLRQMPRFQAT----- 527
Db 287 AIYCVGGFLITCMIGIMVCHMKGRKXDFSSPPAVHKLKSLPLRQVTVSADSSSM 346
Qy 528 --RQPTGVFTWMSQVSDCDPLGNAPY-----LILRKP-GD----- 561
Db 347 NSNTPLVRIITRLLSSNNDTHLLAGVSEYELPDPKWEYPREKLTGLKPLGEGCFQVWMA 406
Qy 562 -----QTEAAKATMDTYRATLERLFDLEQERLLDR-----GAPCSSE 600
Db 407 EAVGIDKDRPKDAATVAVKMLKDDATEKDLSDLVSEMEMMKMGKHKNIINLLGA-CTQD 465
Qy 601 GLSSVIVDHT---FRILDTLRLARIEQTTQPMKVLVETRYKIREGLSEATHSMALTF 657
Db 466 GPLVIVVEYASKGNLREYLRTTRPPGMEYSFDINRIPEEQMTFK---DIVSCYQLARGM 522
Qy 658 DPGSGAFC-----PITNFLVKRTHLAVVODLALSO--CHCVFYGOQVGRNFRNQFPVL 710
Db 523 EYLASQKCIHRDLAARNVLVTETNMWKIADFLGARDINNIDYKKTNGR-----LPVK 576
Qy 711 RRRFVDFNGGFTSTRISITVTLSEGPVSAPNPTLGDAPAGRTFGDLARVSV-EVIRDI 769
Db 577 WMAPEALFDRVYTHQSDV---WSFGVLWMEIFTLG-----GSPYFG-----IPVELFKLL 624
Qy 770 RVKNRVVFGNCTN 783
Db 625 KEGRMDKPGNCTN 638

RESULT 28
US-08-885-418-6
; Sequence 6, Application US/08885418
; Patent No. 5925528
; GENERAL INFORMATION:
; APPLICANT: Chiu, Ing-Ming
; APPLICANT: Poulin, Matthew L
; TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ing-Ming Chiu
; STREET: S2052 Davis Medical Research Center, 480 West
; CITY: Columbus
; STATE: Ohio
; COUNTRY: USA
; ZIP: 43210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/885,418
; FILING DATE:
; CLASSIFICATION: 435
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (614)-293-8093
; TELEFAX: (614)-293-5631
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 729 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-885-418-6

Query Match 1.6%; Score 102; DB 2; Length 729;
Best Local Similarity 20.0%; Pred. No. 1.1;
Matches 111; Conservative 69; Mismatches 206; Indels 168; Gaps 26;
Qy 355 MEGTLPELNLALGYSYARVAGVIGAMVFPNSALYLTVEDESS-----GMTAKDG 403
Db 128 MESWVP--DSENYTCIMENEYGS!---NHTYHLDVVERSPHRPILOAGLPANTTTKVG 181
Qy 404 GPQPSFNRYQYAGPHL-----AANQTDHCH-----VLSSQSGSNTFEFSDYLAL 452
Db 182 GDAEFVCKVSDAQPHQIWRHPELNGSKIGDPGHPYLVKLAAGVNTTDEIEVLYVRN 241
Qy 453 ICDFGAPLLARLLFYLERCDAGFT--GGHGDAKLYVTGTF-----DSEIPCS 498
Db 242 VS-----DAGEYTCAGNSTGISHYHTAWLTVLPDEERELDSSEYTEI 286
Qy 499 -----LCEKTRPVC-----AHTVHRLRQMPRFQAT----- 527
Db 287 AIYCVGGFLITCMIGIMVCHMKGRKXDFSSPPAVHKLKSLPLRQVTVSADSSSM 346
Qy 528 --RQPTGVFTWMSQVSDCDPLGNAPY-----LILRKP-GD----- 561
Db 347 NSNTPLVRIITRLLSSNNDTHLLAGVSEYELPDPKWEYPREKLTGLKPLGEGCFQVWMA 406
Qy 562 -----QTEAAKATMDTYRATLERLFDLEQERLLDR-----GAPCSSE 600
Db 407 EAVGIDKDRPKDAATVAVKMLKDDATEKDLSDLVSEMEMMKMGKHKNIINLLGA-CTQD 465
Qy 601 GLSSVIVDHT---FRILDTLRLARIEQTTQPMKVLVETRYKIREGLSEATHSMALTF 657
Db 466 GPLVIVVEYASKGNLREYLRTTRPPGMEYSFDINRIPEEQMTFK---DIVSCYQLARGM 522
Qy 658 DPGSGAFC-----PITNFLVKRTHLAVVODLALSO--CHCVFYGOQVGRNFRNQFPVL 710
Db 523 EYLASQKCIHRDLAARNVLVTETNMWKIADFLGARDINNIDYKKTNGR-----LPVK 576
Qy 711 RRRFVDFNGGFTSTRISITVTLSEGPVSAPNPTLGDAPAGRTFGDLARVSV-EVIRDI 769
Db 577 WMAPEALFDRVYTHQSDV---WSFGVLWMEIFTLG-----GSPYFG-----IPVELFKLL 624
Qy 770 RVKNRVVFGNCTN 783
Db 625 KEGRMDKPGNCTN 638

RESULT 29
US-07-747-901A-3
; Sequence 3, Application US/07747901A
; Patent No. 5192678
; GENERAL INFORMATION:
; APPLICANT: Iwami, Morita
; APPLICANT: Aramori, Ichiro
; APPLICANT: Fukagawa, Masao
; APPLICANT: Isogai, Takao
; APPLICANT: Kojo, Hitoshi
; TITLE OF INVENTION: CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 Jefferson Davis Highway, Fourth Floor
; CITY: Arlington
; STATE: Virginia
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/747,901A
; FILING DATE: 19910820
; CLASSIFICATION: 435

```

; ATTORNEY/AGENT INFORMATION:
; NAME: Oblon, No. 5192678man F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 18-709-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703)521-4500
; TELEFAX: (703)486-2347
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 774 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-07-747-901A-3

Query Match 1.6%; Score 102; DB 1; Length 774;
Best Local Similarity 20.6%; Pred. No. 1.2;
Matches 145; Conservative 77; Mismatches 241; Indels 242; Gaps 37;

QY 109 LTR--ACNAAREFGSRGCGPPVDGAVETTGAE--ICTR-----LGLPEPTILYLVTAL 161
Db 70 LTRKALGRAAEWLG---AEAADILVRLGMEKVCRRDFEALGVEAKD-----M 117
QY 162 FKEAVFMCNVLHYGGLDIVHINHGDIIRIPLFPVQLFMPDVNRLVDPDFNTHH-----R 216
Db 118 LRAYVAGVNAFLASGA-----PL-PVEYGLLGAE---PEPWPWHSIAVMR 159
QY 217 SIGEGFVYPTFPYNTGLCHLIHDCVIAPMVALVRNVTAV-----ARGAAHLAFDENHEG 272
Db 160 RLG-----LLMGSVWFKLWRMLALPVVGAANALKLRYDDGGRD 197
QY 273 AV-LPPDITYTYFOSSSGTTTARGARNVDNSTSKPSPGGER-----RLAS---IM 322
Db 198 LLCIPGAEADRLADLTPAPVDALLKAMGGDASDAAGGSNNWAVAPGTATGPRL 257
QY 323 AADTALHAEIFNTGIYEETPTDIKEWPMFIGNEGTLPRNLALGSYTVARVAGVIGAMVFS 382
Db 258 AGDPHRVFEI---PGMYAQHHLACDRFDM--IGL--TVP-----GVPGFPHEA 298
QY 383 PNSA-----LYLVEDEDSGMT-----AKDGGPSPFNRF 412
Db 299 HNGKVAYCVTHAFMDIHDLYEQFAGEGRTARFGNDFPVAVSRDRIAVRGGAADREFDIV 358
QY 413 YQFAGPHLAANPQTDQRDGHVLSSTQSGNTSFSDYALICGFGAPLARLLFYLERCD 472
Db 359 ETRHGPVIAGDP---RDGAULTLSRVQFAETDLSFDCLTRMP--GASTVAQLY-----D 407
QY 473 AGAFTG--GH-----GDALKYVTGTDFDSEIPCSLCEKHTRPVCAHTTVHRLR-----QRMP 521
Db 408 ATRGWGLIDHNLVAGDVAGSIGHLVRAVRPSRPRENGWLFVPGWSGEHEWRGIPHEAMP 467
QY 522 RFGQATQPIGVFGTMNSQY-----SDCDPLGNVAPY-----LILRKPGDQTE 564
Db 468 R---VIDPPGGIIVTANNRVVADHDYDLCTDCHP-----PYRAERIMKELVANPAPAVD 519
QY 565 AAKATMDQTYRATLERLFDLEQERLLDRGA--PCSSEGLSSVIV-----D 608
Db 520 DAAAIHADTLSP-----HVGLLRRLREALGARDSDAAEGLRQMLVAMWGRMDAASEVASA 574
QY 609 HPTPRRLDITL---RAIEQTTQ-----FMKVLVETRDYKIRG--- 645
Db 575 YNAPFRALTRLVTRDSGLEQAISHPPFAAVPAGVSPQGVWVAVPTLLRDDDAGMLKGNWSW 634
QY 646 ---LSEA-----THSMALTDPYSGAFCP 666
Db 635 DQALSEALSVASQNLTRGSMGEEHPRFTTHPLATQTFPAWAGLLNP 679

```

RESULT 30
 US-07-935-312-3
 ; Sequence 3, Application US/07935312
 ; Patent No. 5320948

```

; GENERAL INFORMATION:
; APPLICANT: Iwami, Morita
; APPLICANT: Aramori, Ichiro
; APPLICANT: Fukagawa, Masao
; APPLICANT: Isogai, Takao
; APPLICANT: Kojo, Hitoshi
; TITLE OF INVENTION: CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Oblon, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
; ADDRESS: P.C.
; STREET: 1755 Jefferson Davis Highway, Fourth Floor
; CITY: Arlington
; STATE: Virginia
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/935,312
; FILING DATE: 19920826
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Oblon, No. 5320948man F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 18-769-0 DIV
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703)521-4500
; TELEFAX: (703)486-2347
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 774 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-07-935-312-3

```

```

Query Match 1.6%; Score 102; DB 1; Length 774;
Best Local Similarity 20.6%; Pred. No. 1.2;
Matches 145; Conservative 77; Mismatches 241; Indels 242; Gaps 37;

QY 109 LTR--ACNAAREFGSRGCGPPVDGAVETTGAE--ICTR-----LGLPEPTILYLVTAL 161
Db 70 LTRKALGRAAEWLG---AEAADILVRLGMEKVCRRDFEALGVEAKD-----M 117
QY 162 FKEAVFMCNVLHYGGLDIVHINHGDIIRIPLFPVQLFMPDVNRLVDPDFNTHH-----R 216
Db 118 LRAYVAGVNAFLASGA-----PL-PVEYGLLGAE---PEPWPWHSIAVMR 159
QY 217 SIGEGFVYPTFPYNTGLCHLIHDCVIAPMVALVRNVTAV-----ARGAAHLAFDENHEG 272
Db 160 RLG-----LLMGSVWFKLWRMLALPVVGAANALKLRYDDGGRD 197
QY 273 AV-LPPDITYTYFOSSSGTTTARGARNVDNSTSKPSPGGER-----RLAS---IM 322
Db 198 LLCIPGAEADRLADLTPAPVDALLKAMGGDASDAAGGSNNWAVAPGTATGPRL 257
QY 323 AADTALHAEIFNTGIYEETPTDIKEWPMFIGNEGTLPRNLALGSYTVARVAGVIGAMVFS 382
Db 258 AGDPHRVFEI---PGMYAQHHLACDRFDM--IGL--TVP-----GVPGFPHEA 298
QY 383 PNSA-----LYLVEDEDSGMT-----AKDGGPSPFNRF 412
Db 299 HNGKVAYCVTHAFMDIHDLYEQFAGEGRTARFGNDFPVAVSRDRIAVRGGAADREFDIV 358
QY 413 YQFAGPHLAANPQTDQRDGHVLSSTQSGNTSFSDYALICGFGAPLARLLFYLERCD 472
Db 359 ETRHGPVIAGDP---RDGAULTLSRVQFAETDLSFDCLTRMP--GASTVAQLY-----D 407
QY 473 AGAFTG--GH-----GDALKYVTGTDFDSEIPCSLCEKHTRPVCAHTTVHRLR-----QRMP 521

```

408 ATRCGLIDHNLVAGDVAGSIGHVLRVPSRPRENGWLPVPGWSGEHWRGWPHEAMP 467
522 RFGQATROPIGVFGTMSQY-----SDCDPLGNYAPY-----LILKPGDQTE 564
468 R---VIDPPGGIIVTANNRVVADDDHPDYLCTDCHP-----PYRAERIMKRLVANPAFAVD 519
565 AAKATMODTYRATLERLFDLEQERLLDRGA--PCSEGLSSVIV-----D 608
520 DAAIAHDTLSP-----HVGLLRRLEALGARDSDAAGLRQMLVANDGRMDAASEVASA 574
609 HPTERRILDTL---RARIEQTTQ-----FMKVLVETRDYKIREG--- 645
575 YNAFERALTRIVTRDSGLEQAISHPFAAFAVGVSPQGVWMAVPTLLRDDDDAGMLKQWSW 634
646 ---LSEA-----THSMALTFDPYSGAFPCP 666
635 DQALSEALSVASQNLTRGSRWGEHRPRFTHPLATQFFAWAGLLNP 679

RESULT 31

US-08-633-760-50
; Sequence 50, Application US/08633760
; Patent No. 5804429
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINEO
; APPLICANT: SAITO, YOSHIMASA
; APPLICANT: FUJIMURA, TAKAO
; APPLICANT: ISHII, YOSHINORI
; APPLICANT: MCGUCHI, YUJI
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 JEFFERSON DAVIS HIGHWAY, SUITE 400
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/633,760
FILING DATE: 01-MAY-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F.
REGISTRATION NUMBER: 24,618
REFERENCE/POCKET NUMBER: 18-929-0 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248955 OPAT UR
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 774 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-633-760-50

Query Match 1.6%; Score 102; DB 1; Length 774;
Best Local Similarity 21.2%; Pred. No. 1.2;
Matches 149; Conservative 73; Mismatches 243; Indels 238; Gaps 39;

QY 109 LTR--ACNAAREFCRQCGPPVDGAVETTGAE-ICTR-----LGLPEPNTILVVTAL 161
DB 70 LTRKALGRAAEWUG---AEAABDILVRLGMEKVCRRDFEALGVKAXD-----M 117

QY 162 FKEAVFMCNVLPHYGGLDIVHINHGDVIRIPLFPVQLFMPDVNRLVPDPFNTH-----R 216
DB 118 LRAYVAGVNAFLASGA-----PL-PVEYGLLGAE---PEPEWPHSIAVNR 159
QY 217 STGEGFVYPTFPYNTGLCHLIHDCVIAPM--AAVALRVNVTAVARCAHLADENHEGAV 274
DB 160 RLG-----LLGVSFVFKLWRLALFV-----VGAANALKRLVDDGGRDLL 199
QY 275 -LPPDITYTYFOSSSGTITARGARRNDVNSTKPSGGER-----RLAS---IMAA 324
DB 200 CIPPGAEDRLADLATLRPAVDALLKAMGSDASDAAGGSNNWAVAPGTATGRPILAG 259
QY 325 DIALHAEVITNGTVEETPTDIKEWPMFTMGTTPLRNLALGSYTVARVAGVIGAMVFSN 384
DB 260 DPHRVPEI---PYVAQHLACDRFDM-IGL--TVP-----GVPGFPFHAH 300
QY 385 SA-----LYLVEVDSGTE-----AKCGGPGPSFNRFFQ 414
DB 301 GKVAVCVTHAFMDIHDLYLEQFAGEGRTARFGNDPEPVAWSRDRITAVRGADREFDIVET 360
QY 415 FAGPHLANPQTRDRGHVLSQSSNTSEFVDYALICGFGAPLALLFYLERCDAG 474
DB 361 RHGPFVIAGDP---RDGAALTLRSVQFAETDLSFDCLTRMP--GASTVAQLY-----DAT 409
QY 475 AFTG--GH-----GDALKYVTGTFDSEIPCSCLEKHTRPVCAHTTVHRLR-----QSMRPF 523
DB 410 RGWGLIDHNLVAGDVAGSIGHVLRVPSRPRENGWLPVPGWSGEHWRGWPHEAMP-- 468
QY 524 GOATROPIGVFGTMSQY-----SDCDPLGNYAPY-----LILKPGDQTEAA 566
DB 469 --VIDPPGGIIVTANNRVVADDDHPDYLCTDCHP-----PYRAERIMKRLVANPAFAVDDA 521
QY 567 KATMODTYRATLERLFDLEQERLLDRGA--PCSEGLSSVIV-----DHP 610
DB 522 AAIAHDTLSP-----HVGLLRRLEALGARDSDAAGLRQMLVANDGRMDAASEVASAYN 576
QY 611 TPRRILDTL---RARIEQTTQ-----FMKVLVETRDYKIREG----- 645
DB 577 AFRRALTRIVTRDSGLEQAISHPFAAFAVGVSPQGVWMAVPTLLRDDDDAGMLKQWSWQ 636
QY 646 -LSEA-----THSMALTFDPYSGAFPCP 666
DB 637 ALSEALSVASQNLTRGSRWGEHRPRFTHPLATQFFAWAGLLNP 679

RESULT 32
US-08-019-870-1
; Sequence 1, Application US/08019870
; Patent No. 5336613
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINEO
; APPLICANT: YOSHIMASA, SAITO
; APPLICANT: SASAKI, HITOSHI
; APPLICANT: ISHII, YOSHINORI
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/019,870
; FILING DATE: 19930219
; CLASSIFICATION: 435

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; ATTORNEY/AGENT INFORMATION:
; NAME: Obion, No. 5336613man F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 18-791-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 773 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-019-870-1

Query Match 1.6%; Score 101.5; DB 1; Length 773;
Best Local Similarity 21.9%; Pred. No. 1.4;
Matches 91; Conservative 41; Mismatches 139; Indels 145; Gaps 19;

QY 372 VAGVIGAMVFSPNSA-----LYLTVEDSGMTE-----AK 401
Db 287 VPGVPGPHFAHNGKVAYCVTHAFMDIHDLYLEQPAGEGRTARFGNDFEPVAVWSRDRIAV 346
QY 402 DGGPGSPFNRFYQFAGPHLAANPQTRDGHVLSQSTGSSNTEFSVDYLALICGFGAPLL 461
Db 347 RGGADREFDIVETRHGFPVIAGDP---RDGAALTLSVQFAETDLSFDCLTRMP--GASTV 401
QY 462 ARLLFYLERCDAGAFGTG--GH-----GDALKYVTGTFDSEIPCSLCEKHTRPVCAHTTVHR 515
Db 402 AQLY-----DATRGWGLIDHNLVAGDVAGSIGHLVRAVPSPRPNGLVPVPGWSGEHE 455
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Db 456 WRGWIPHEAMPR---VIDPPGGIIVTANNRVVADDDHDPYLCCTDCHP-----PYRAERIMK 507
QY 554 LILRKQDQTEAAKATQDQTYRATLERLFDLQERLLDRGA--PCSSGLSSVIV--- 607
Db 508 RLVANPAFVDDAAAIHADTLSP-----HVGLLRRLLEALGARDSDAAEGLRQMLVWDG 562
QY 608 -----DHPTFRRLDTL---RARIETTTQ-----FMKVLVET 637
Db 563 RMDAASEVASAYNAFRRALTRLVTRDSGLEQAISHPPAAVAPGVSPQGVWVAVPTLLRD 622
QY 638 RDKYKIREG-----LSEA-----THSMALTFDPYSGAFCP 666
Db 623 DDAGMLKGWSWDQALSEALSASQNLTRSGWGEHRPRFTHTPLATQFPWAGLLNP 678

RESULT 33
US-08-019-870-6
; Sequence 6, Application US/08019870
; Patent No. 5336613
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINEO
; APPLICANT: YOSHIMASA, SAITO
; APPLICANT: SASAKI, HITOSHI
; APPLICANT: ISHII, YOSHINORI
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: P.C.
; ADDRESS: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/019,870
; FILING DATE: 19930219
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Obion, No. 5336613man F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 18-791-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 773 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-019-870-6

Query Match 1.6%; Score 101.5; DB 1; Length 773;
Best Local Similarity 21.9%; Pred. No. 1.4;
Matches 91; Conservative 41; Mismatches 139; Indels 145; Gaps 19;

QY 372 VAGVIGAMVFSPNSA-----LYLTVEDSGMTE-----AK 401
Db 287 VPGVPGPHFAHNGKVAYCVTHAFMDIHDLYLEQPAGEGRTARFGNDFEPVAVWSRDRIAV 346
QY 402 DGGPGSPFNRFYQFAGPHLAANPQTRDGHVLSQSTGSSNTEFSVDYLALICGFGAPLL 461
Db 347 RGGADREFDIVETRHGFPVIAGDP---RDGAALTLSVQFAETDLSFDCLTRMP--GASTV 401
QY 462 ARLLFYLERCDAGAFGTG--GH-----GDALKYVTGTFDSEIPCSLCEKHTRPVCAHTTVHR 515
Db 402 AQLY-----DATRGWGLIDHNLVAGDVAGSIGHLVRAVPSPRPNGLVPVPGWSGEHE 455
QY 516 LR-----QRMPRFQATROPIGVFGTWSQY-----SDCDPLGNVAPY----- 553
Db 456 WRGWIPHEAMPR---VIDPPGGIIVTANNRVVADDDHDPYLCCTDCHP-----PYRAERIMK 507
QY 554 LILRKQDQTEAAKATQDQTYRATLERLFDLQERLLDRGA--PCSSGLSSVIV--- 607
Db 508 RLVANPAFVDDAAAIHADTLSP-----HVGLLRRLLEALGARDSDAAEGLRQMLVWDG 562
QY 608 -----DHPTFRRLDTL---RARIETTTQ-----FMKVLVET 637
Db 563 RMDAASEVASAYNAFRRALTRLVTRDSGLEQAISHPPAAVAPGVSPQGVWVAVPTLLRD 622
QY 638 RDKYKIREG-----LSEA-----THSMALTFDPYSGAFCP 666
Db 623 DDAGMLKGWSWDQALSEALSASQNLTRSGWGEHRPRFTHTPLATQFPWAGLLNP 678

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RESULT 34
US-08-019-870-8
; Sequence 8, Application US/08019870
; Patent No. 5336613
; GENERAL INFORMATION:
; APPLICANT: NIWA, MINEO
; APPLICANT: YOSHIMASA, SAITO
; APPLICANT: SASAKI, HITOSHI
; APPLICANT: ISHII, YOSHINORI
; TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: P.C.
; ADDRESS: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/019,870
FILING DATE: 19930219
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5336613man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 18-791-0
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 774 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-019-870-8

Query Match 1.6%; Score 101.5; DB 1; Length 774;
Best Local Similarity 21.9%; Pred. No. 1.4;
Matches 91; Conservative 41; Mismatches 139; Indels 145; Gaps 19;

QY 372 VAGVIGAMVPSNSA-----LYLVEVDSGMT-----AK 401
DB 288 VPGVPGFPHAHNGKVAYSVTHAFMDIHDLYLQFAGEGRTARFGNDFEPVANSRDRIAV 347
QY 402 DGGPGPSFNRFYQFAGPHLANPOTDRDGHVLSQSSTGSSNTEFSDVYDALICGFGAPLL 461
DB 348 RGGADREFDIVETRHGPIAGDP---RDGAALTLSRVQFAETDLSFCLTRMP--GASTV 402
QY 462 ARLLFYLERCDAGFTG--GH-----GDALKVYVTGTFDSEIPCSLCEKHTRPVCAHTTVHR 515
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QY 554 LILRKPGDQTEAAKATMDQTYRATLERLFDLEQERLLDRGA--PCSSSEGLSSVIV----- 607
DB 509 RLVPANPAFVDDAAAIHADTLSP-----HVGLLRRLREALGARDSDAAGLQMLVAVDWG 563
QY 608 -----DHPTFRILDTL---RARIETTTQ-----FMKVLVET 637
DB 564 RMDAASEVASAYNAFRALTRLVTRSGLEQAISHPFAAVAPGVSPQGVVAVPTLLRD 623
QY 638 RYKIREG-----LSEA-----THSMALTFDPYSGAFCP 666
DB 624 DDAGMLKGSWDQALSEALSASQNLGTRSGWGEHRPFRTHPLATQFPWAGLLNP 679

RESULT 35
US-08-019-870-11
Sequence 11, Application US/08019870
Patent No. 5336613
GENERAL INFORMATION:
APPLICANT: NIWA, MINEO
APPLICANT: YOSHIMASA, SAITO
APPLICANT: SASAKI, HITOSHI
APPLICANT: ISHII, YOSHINORI
TITLE OF INVENTION: A NEW CEPHALOSPORIN C ACYLASE
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
ADDRESSEE: P.C.
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington

STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/019,870
FILING DATE: 19930219
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5336613man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 18-791-0
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 774 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-019-870-11

Query Match 1.6%; Score 101.5; DB 1; Length 774;
Best Local Similarity 21.9%; Pred. No. 1.4;
Matches 91; Conservative 41; Mismatches 139; Indels 145; Gaps 19;

QY 372 VAGVIGAMVPSNSA-----LYLVEVDSGMT-----AK 401
DB 288 VPGVPGFPHAHNGKVAYSVTHAFMDIHDLYLQFAGEGRTARFGNDFEPVANSRDRIAV 347
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QY 462 ARLLFYLERCDAGFTG--GH-----GDALKVYVTGTFDSEIPCSLCEKHTRPVCAHTTVHR 515
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QY 516 LR-----QRMPPFGQATROPIGVFGTMSOY-----SDCDPLGNVAPY----- 553
DB 457 WRGWIPHEAMPR---VIDPPGGIIVTANNRVVADDDHDPYLCCTDCHP-----PYRAERIMK 508
QY 554 LILRKPGDQTEAAKATMDQTYRATLERLFDLEQERLLDRGA--PCSSSEGLSSVIV----- 607
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QY 608 -----DHPTFRILDTL---RARIETTTQ-----FMKVLVET 637
DB 564 RMDAASEVASAYNAFRALTRLVTRSGLEQAISHPFAAVAPGVSPQGVVAVPTLLRD 623
QY 638 RYKIREG-----LSEA-----THSMALTFDPYSGAFCP 666
DB 624 DDAGMLKGSWDQALSEALSASQNLGTRSGWGEHRPFRTHPLATQFPWAGLLNP 679

Search completed: June 3, 2004, 07:15:17
Job time : 34 secs

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OM protein - protein search, using sw model

Run on: June 3, 2004, 07:04:28 ; Search time 553 Seconds
(without alignments)
612.026 Million cell updates/sec

Title: US-09-769-699-2

Perfect score: 6294

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Searched: 1155919 seqs, 28138677 residues

Total number of hits satisfying chosen parameters: 1155919

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

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SUMMARIES

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2	3054	48.5	1452	US-10-050-673-2	Sequence 2, Appli
3	3015.5	47.9	1196	US-10-200-562-200	Sequence 200, App
4	3015.5	47.9	1196	US-10-237-551-200	Sequence 200, App
5	3015.5	47.9	1196	US-10-237-551-232	Sequence 232, App
6	788	12.5	274	US-10-237-551-231	Sequence 231, App
7	736	11.7	248	US-10-156-761-9121	Sequence 9121, Ap
8	123.5	2.0	850	US-10-454-351-34	Sequence 34, Appli
9	123.5	2.0	2597	US-10-206-576-358	Sequence 358, App
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13	120.5	1.9	2597	US-09-905-129-2	Sequence 10, Appli
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28	120	1.9	5245	14	US-10-329-079-11	Sequence 11, Appli
29	118	1.9	452	12	US-10-425-114-71520	Sequence 71520, A
30	118	1.9	19608	15	US-10-084-846A-8	Sequence 8, Appli
31	114.5	1.8	1479	12	US-10-231-956A-325	Sequence 325, App
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33	114.5	1.8	1496	14	US-10-021-860-125	Sequence 125, App
34	114.5	1.8	1496	15	US-10-331-496A-28	Sequence 28, Appli
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39	113	1.8	1787	12	US-10-282-122A-62625	Sequence 62625, A
40	113	1.8	2505	12	US-10-205-331-20	Sequence 20, Appli
41	112	1.8	943	12	US-10-282-122A-68197	Sequence 68197, A
42	112	1.8	3868	16	US-10-461-194-103	Sequence 103, App
43	112	1.8	6620	15	US-10-080-334-290	Sequence 290, App
44	112	1.8	6620	16	US-10-408-765A-2291	Sequence 2291, Ap
45	111.5	1.8	4317	12	US-10-282-122A-67862	Sequence 67862, A
46	111	1.8	5215	9	US-09-861-289-2	Sequence 2, Appli
47	111	1.8	5215	9	US-09-860-846-2	Sequence 2, Appli
48	111	1.8	5215	10	US-09-988-384B-2	Sequence 2, Appli
49	111	1.8	5215	10	US-09-836-821-2	Sequence 2, Appli
50	111	1.8	5215	14	US-10-271-889-45	Sequence 45, Appli
51	110.5	1.8	3069	9	US-09-712-363-246	Sequence 246, App
52	110	1.7	771	16	US-10-389-566-934	Sequence 934, App
53	110	1.7	784	12	US-10-282-122A-68623	Sequence 68623, A
54	110	1.7	1039	12	US-10-282-122A-77942	Sequence 77942, A
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62	107	1.7	905	15	US-10-369-493-2550	Sequence 2550, Ap
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71	105.5	1.7	1062	16	US-10-389-566-608	Sequence 608, App
72	105.5	1.7	1563	15	US-10-334-143-34	Sequence 34, Appli
73	105.5	1.7	1967	14	US-10-219-834-85	Sequence 85, Appli
74	105.5	1.7	1967	14	US-10-225-567A-575	Sequence 575, App
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76	104.5	1.7	635	16	US-10-643-233-5	Sequence 5, Appli
77	104.5	1.7	1471	8	US-08-911-519A-1	Sequence 1, Appli
78	104.5	1.7	1515	14	US-10-240-154-8	Sequence 8, Appli
79	104.5	1.7	3530	12	US-10-296-115-1101	Sequence 1101, Ap
80	104.5	1.7	6304	14	US-10-147-026-16	Sequence 16, Appli
81	104	1.7	3192	14	US-10-132-134-10	Sequence 10, Appli
82	103.5	1.6	495	12	US-10-425-114-65528	Sequence 65528, A
83	103.5	1.6	942	12	US-10-282-122A-57721	Sequence 57721, A
84	103.5	1.6	1750	12	US-10-243-552-920	Sequence 920, App
85	103	1.6	1050	12	US-10-282-122A-78119	Sequence 78119, A
86	103	1.6	3472	13	US-10-027-805-4	Sequence 4, Appli
87	103	1.6	3472	13	US-10-034-623-4	Sequence 4, Appli
88	103	1.6	3472	14	US-10-027-801-4	Sequence 4, Appli

89 103 1.6 3472 14 US-10-029-120-4 Sequence 4, Appli
90 102 1.6 625 12 US-10-282-122A-47996 Sequence 47996, A
91 102 1.6 876 12 US-10-282-122A-62122 Sequence 62122, A
92 102 1.6 1074 15 US-10-369-493-359 Sequence 359, App
93 102 1.6 4590 11 US-09-970-944-21 Sequence 21, Appl
94 102 1.6 4590 14 US-10-160-758-13 Sequence 13, Appl
95 102 1.6 4590 14 US-10-160-758-13 Sequence 14, Appl
96 102 1.6 4590 14 US-10-060-036-157 Sequence 157, App
97 102 1.6 4590 14 US-10-298-027-1323 Sequence 1323, Ap
98 101.5 1.6 4590 15 US-10-128-714-8088 Sequence 8088, Ap
99 101 1.6 336 12 US-10-425-114-70947 Sequence 70947, A
100 101 1.6 587 12 US-10-282-122A-50633 Sequence 50633, A

ALIGNMENTS

RESULT 1
US-09-769-699-2
; Sequence 2, Application US/09769699
; Publication No. US20010039051A1
; GENERAL INFORMATION:
; APPLICANT: Silverstein, Saul J
; APPLICANT: Lungu, Octavian
; APPLICANT: Gershon, Anne A
; APPLICANT: Annunziato, Paula W
; TITLE OF INVENTION: ZVZ ORF29p Protein-Related Compositions and Methods
; FILE REFERENCE: 0575/61152-A
; CURRENT APPLICATION NUMBER: US/09/769,699
; CURRENT FILING DATE: 2002-04-22
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 1203
; TYPE: PRT
; ORGANISM: Varicella zoster
; ORGANISM: US-09-769-699-2

Query Match 100.0%; Score 6294; DB 12; Length 1203;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1203; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MENTQKTVVPTGPGLVYACRVEDLDLEISFLAARSTDSLLALPLMRNLVETKTS 60
Db 1 MENTQKTVVPTGPGLVYACRVEDLDLEISFLAARSTDSLLALPLMRNLVETKTS 60

Qy 61 SLAVSGARTTGLAGAGITLKTTSHPYPSVFFVHGKHYLPSSAAPNLTRACNAARERF 120
Db 61 SLAVSGARTTGLAGAGITLKTTSHPYPSVFFVHGKHYLPSSAAPNLTRACNAARERF 120

Qy 121 GFSSRCQPPVDGAVETTGABICTRLGLEPENTILYLVTALFKBAVPMCNVFLHYGGLDI 180
Db 121 GFSSRCQPPVDGAVETTGABICTRLGLEPENTILYLVTALFKBAVPMCNVFLHYGGLDI 180

Qy 181 VHINHGDIIRLPLEPVLQFMPDNLVDPDNTTHRSIGEGFVYPTFYNTGLCHLHDC 240
Db 181 VHINHGDIIRLPLEPVLQFMPDNLVDPDNTTHRSIGEGFVYPTFYNTGLCHLHDC 240

Qy 241 VIAPMVALRVNTAVARGAAHLAFDENHEGAVLPDITVTFQSSSSGTTTARGARN 300
Db 241 VIAPMVALRVNTAVARGAAHLAFDENHEGAVLPDITVTFQSSSSGTTTARGARN 300

Qy 301 DVNSTKPSGGPERRLASMAADTALHAEVIENTGIVSETPTDIKEWPMFIGMEGTL 360
Db 301 DVNSTKPSGGPERRLASMAADTALHAEVIENTGIVSETPTDIKEWPMFIGMEGTL 360

Qy 361 RLNALGYSYARVAGVIGAMVSPNSALYLTEVEDSGMTEAKDGGPSPFNRFQAGPHL 420
Db 361 RLNALGYSYARVAGVIGAMVSPNSALYLTEVEDSGMTEAKDGGPSPFNRFQAGPHL 420

Qy 421 AANPOTDRDGHVLSQSTSSNTSFSDYLALICGFGAPILARLLFYLERCDAGFTGGH 480
Db 421 AANPOTDRDGHVLSQSTSSNTSFSDYLALICGFGAPILARLLFYLERCDAGFTGGH 480

Qy 481 GDALKYVTGTFDSEIPCSLCEKHTRPVCAHTTTHRLRQMRPFQATROPFIGVGTNMQ 540
Db 481 GDALKYVTGTFDSEIPCSLCEKHTRPVCAHTTTHRLRQMRPFQATROPFIGVGTNMQ 540

Qy 541 YSDCDPLGNVAPYLIILKPGDQTEAAKATMDTYRATLELFDLEQERLLDRGAPCSSE 600
Db 541 YSDCDPLGNVAPYLIILKPGDQTEAAKATMDTYRATLELFDLEQERLLDRGAPCSSE 600

Qy 601 GLSSVIVDHPTEFRILDTLRAIREQTTQPMKVLVETRDYKIREGLSEATHSMALTDPY 660
Db 601 GLSSVIVDHPTEFRILDTLRAIREQTTQPMKVLVETRDYKIREGLSEATHSMALTDPY 660

Qy 661 SGAFCPITNFKRTHLAVVDLALSOCHVYQGVQVEGRNFRNQFQVLRFRFVDFL 720
Db 661 SGAFCPITNFKRTHLAVVDLALSOCHVYQGVQVEGRNFRNQFQVLRFRFVDFL 720

Qy 721 GFISTRSITVTLSSEGPSANPTLQDAPAGRTFDGLARVSVEVIRDIRVKNRVFVSGN 780
Db 721 GFISTRSITVTLSSEGPSANPTLQDAPAGRTFDGLARVSVEVIRDIRVKNRVFVSGN 780

Qy 781 CTNLSEAAARLVGLASAYQKQKRVDMHGLGFLKQFHGLLFPGRMPNSKSPNQW 840
Db 781 CTNLSEAAARLVGLASAYQKQKRVDMHGLGFLKQFHGLLFPGRMPNSKSPNQW 840

Qy 841 FWTLLQRNOMPADKLTHEEITTTAAVKRFTTEVAAINFINLPPTCIGELAQFYMANLILK 900
Db 841 FWTLLQRNOMPADKLTHEEITTTAAVKRFTTEVAAINFINLPPTCIGELAQFYMANLILK 900

Qy 901 YCDHSQYLINTLSITIGARRPRDPSSVLHWIRKDVTSAADIEIQAQKALLEKTENLPELW 960
Db 901 YCDHSQYLINTLSITIGARRPRDPSSVLHWIRKDVTSAADIEIQAQKALLEKTENLPELW 960

Qy 961 TTAFTSTHLVRAAMNQRPMVVLGISIKYHGAAGNVRVFOAGNWSGLNGKNCVPLFTFD 1020
Db 961 TTAFTSTHLVRAAMNQRPMVVLGISIKYHGAAGNVRVFOAGNWSGLNGKNCVPLFTFD 1020

Qy 1021 RTRRFIIACPRGGFICPVTPGSSGNRETTLSQDVGRITVSGGAMVQLAIYATVVRAGAR 1080
Db 1021 RTRRFIIACPRGGFICPVTPGSSGNRETTLSQDVGRITVSGGAMVQLAIYATVVRAGAR 1080

Qy 1081 AQHMAFDWLSLTDDEFLARLELHDOIOTLETPTVTEGALAEVKILDEKTTAGDGET 1140
Db 1081 AQHMAFDWLSLTDDEFLARLELHDOIOTLETPTVTEGALAEVKILDEKTTAGDGET 1140

Qy 1141 PTNLAFNFDSCPSHDTTSNVNLSGNSISGSTVPLKRPDPEDDELFDLSGIPKHNIT 1200
Db 1141 PTNLAFNFDSCPSHDTTSNVNLSGNSISGSTVPLKRPDPEDDELFDLSGIPKHNIT 1200

Qy 1201 MEM 1203
Db 1201 MEM 1203

RESULT 2
US-10-050-673-2
; Sequence 2, Application US/10050673
; Publication No. US20020151033A1
; GENERAL INFORMATION:
; APPLICANT: David M. Kaipe
; APPLICANT: Travis J. Taylor
; APPLICANT: Elizabeth McNamee
; TITLE OF INVENTION: Replication-Competent Virus Expressing A
; TITLE OF INVENTION: Fusion Protein
; FILE REFERENCE: HUS98-05
; CURRENT APPLICATION NUMBER: US/10/050,673
; CURRENT FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: US/09/127,227
; PRIOR FILING DATE: 1998-07-31
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 1452

; TYPE: PRT		
; ORGANISM: herpesvirus		
US-10-050-673-2		
Query Match 48.5%; Score 3054; DB 13; Length 1452;		
Best Local Similarity 49.8%; Pred. No. 5e-294;		
Matches 609; Conservative 200; Mismatches 366; Indels 48; Gaps 17;		
Qy	1 MENTOKVT---VPTGPIGVYV--ACRVEDLDLEISFLAARSSTDSLLALLPLMNTLVE 55	
Db	1 METPKTATTIKVPPGPIGVYARACPSGEL--LALLSARSGDADVAAPLVVGLTVE 58	
Qy	56 KTFSSLAASGARTTGLAGAGITLKLTSTHFPYFVFFHGGKHVLPSSAAPNITRACNA 115	
Db	59 SGFEANVAVVGSRTTGLGTAVALSLKLPSSHYSVVVFHGGHLDPSQAPNLTRLCER 118	
Qy	116 ARERPGSRGCGPPVDGAVETTGAEICTRLGIBENTILYLVNTALKEAVFMCNVLHY 175	
Db	119 ARRHFGFSDYTPRPGDLKHETTGELCERLGLDPRALLYLVVTEGFKBAVCINNTLHL 178	
Qy	176 GGLDIVHNHGDVIRIPFPVQLFMPDVNRVPPFNTHRSIGEGFVYPTFPYNTGLCH 235	
Db	179 CGSKDVTTCGAEVHRIPYVQLFNPDSRVIAFPFNANHSIGENFTYPLPFFNRPLNR 238	
Qy	236 LIHDCVIAPMAVALRVNTAVARGAAHLADENHEGAVLPDITYYFQSSSGTTTAR 295	
Db	239 LLFEAVGPAVALRCRNVDAVARAAHLADENHEGALPADITFTAFASQG--KTPR 296	
Qy	256 GARRNDVNSTKPSGSGFERLAGISIMAADTALHAENVFTNGIYEETPTDIKEWPMFIG 355	
Db	297 GGR-----DGGKGPAGGFEQRLASVMAGDAALESIVNAVDEPTDISANPLCEGO 351	
Qy	356 EGTLPRLNALGSYARVAGVIGAMVFPNSALYLTVESDSGMTBAKGGPGPSNRRYQF 415	
Db	352 DTAARANAVGAYLARAAGLVGMVFTNSALHLTEVDVDPADPKDHSK-PSFYRFLV 410	
Qy	416 AGPHLAAPQTRDGHVL-----SSQSTGSSNTEFSDVLYALICGFGAPLLARLLYL 468	
Db	411 PGTHVAANPQVDREGHVVPGEGRPTAPLVGTQ-EFAGEHLAMLCGFSBALLAKMFLYL 469	
Qy	469 ERCDAGATGGHG-DALKVVTGTFDSEIPCSICEKHTRPVCAHTTVHRLRMRPFQAT 527	
Db	470 ERCDGVIAGROMDVFYRVADSNQTDVPCNLCTPTDTRHACVHTLMELRAHFKFASAA 529	
Qy	528 RQPIGVGTMSQYSDCPLGNAPYLIILRPGDQTEAAKTMQDTPYRATLERLFDLEQ 587	
Db	530 RGAIGVGTMSWYSDCVDGLNVAFAFSALKR-ADGSETARTIMQETYPAAATERYVAELET 588	
Qy	588 ERLLDORGAPCSSEGLSSVVDHPTFRILDTLRARIEQITTFQFMKLVETRDYKIREGLS 647	
Db	589 LQYVDAQVPTAMGRLETTITNREALHTVVNNRVQVVDREVQLMNLVEGRNFKPRDLG 648	
Qy	648 EATHSMALTFDPSYGAFCPIITNVLKTRTHLAVVDLALSQCHCVFYGOQVEGRNFRNQF 707	
Db	649 EANHMSLTLDPYACGCPCLLQLLGRSNLAIVYQDLALSQCHGVFAGQSVEGRNFRNQF 708	
Qy	708 PVLRRFVDLFGNGISTRITVTLSEG-PVSAFNPTLGODAPAGRTFDGLARVSVEVI 766	
Db	709 PVLRRVDMFMNFGFLSAKTLTVALSEGAAICAPSLTAGQTAPASSSEFGDVARVTLGFP 768	
Qy	767 RDIRVKNRVVFGNCTNLSEAAARLVGLASAYQOEKRVMDLHMGALGFLKQFHLFFP 826	
Db	769 KILRVKSRVLFAGANASEAAKARVASLOSAYQKDXQKVDILLGFLGLKQFHAATFP 828	
Qy	827 RGMPPNKSPPNQFWTLQRNQMPADKLTHEIITIAAKGFTEEYAAINFILPPTCI 886	
Db	829 NGKPPGSGNQPNQFWFMTALQRNLQRLSLREDIETIAFIKFFSLDYGAINFILAPNV 888	
Qy	887 GLAQFYMANLILKYCHDSOYLINTLTSTICARAPROPSSVLHWRKDVTSAADETQOA 946	
Db	889 SELAMYMANQLIRYCDHSTYFINTLITAIAGSRAPPSVQAAAAH---SAQCGGLEAGA 945	
Qy	947 KALLEKTENLPBLWTTAFTSTHVLRAAMNQRPMMVLGISISKYHGAAGNNRVFQAGNWSG 1006	

Db	946 RALMDAVDAHPCGAWTSMFASCNLLRPVVAARPMVVLGLSISKYVGNAGNDRVFQAGNWS 1005	
Qy	1007 LMGKKVCPLEFTFDRTRRRIIACPRGGFCIPVTGPSSGNRETTLSDOVRGIIVSGGAMVQ 1066	
Db	1006 LMGKKACPELLIFDRIRKFKVLACPRAGFVCAASNLCGGHAHESLCEQLRGILISEGAAVA 1065	
Qy	1067 LAIYATVRAVGARAQHAQFDDWLSITDDEFLARDEELHQQIQLPFWTVEGAL--- 1123	
Db	1066 SSVFVATVKSIGPRTQOLQIEDWLALLEDEYLSSEMMELTARALERGNGEWSTDAALEVA 1125	
Qy	1124 -BAVKILDEKTTAGDQETINLAFED--SCFESHDTTSNVLNIGSNISGTSVPGLEKP 1180	
Db	1126 HEAEALVSQLNAGE-----VFNFGDFGCE-----DDNATPFGGPGAGPAGFAGRKKA 1173	
Qy	1181 PEDDELFDLSGIPIKHGNITMEM 1203	
Db	1174 FHGDDPFG-EGPDDKGDJLDM 1195	
RESULT 3		
US-10-200-562-200		
; Sequence 200, Application US/10200562		
; Publication No. US20030165819A1		
; GENERAL INFORMATION: Patrick		
; APPLICANT: McGowen, Patrick		
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND		
; TITLE OF INVENTION: TREATMENT OF HERPES SIMPLEX VIRUS INFECTION		
; FILE REFERENCES: 210121.538C2		
; CURRENT APPLICATION NUMBER: US/10/200,562		
; CURRENT FILING DATE: 2002-07-19		
; NUMBER OF SEQ ID NOS: 212		
; SOFTWARE: FastSeq for Windows Version 4.0		
; SEQ ID NO 200		
; LENGTH: 1196		
; TYPE: PRT		
; ORGANISM: HSV2		
US-10-200-562-200		
Query Match 47.9%; Score 3015.5; DB 14; Length 1196;		
Best Local Similarity 49.0%; Pred. No. 2.5e-290;		
Matches 595; Conservative 213; Mismatches 366; Indels 41; Gaps 16;		
Qy	4 TQKTVTPGCPGVVY--ACRVEDLDLEISFLAARSSTDSLLALLPLMRLNLTVEKFTSS 61	
Db	7 TTTTVKVPVPGMGIYVGRACPAEGLEL--LSLSARSGDADVAAPLVGLTVESGFEAN 64	
Qy	62 LAVVSGARTTGLAGAGITLKLTTHFPYFVFFHGGKHVLPSSAAANLTACNAARERFG 121	
Db	65 VAAVVGSRITGLGTAVALSLKLPSSHYSVYVFGGRLAPSTQAPNLTRLCERARPHFG 124	
Qy	122 FSRQCGPPVDGAVETTGAEICTRLGLEPENTILYLVNTALFKEAVFMCNVLHYVGLDIV 181	
Db	125 FADYAPRCPDLKHETTGDCALCERLGLDPRALLYLVITEGFRVAVCISNTFHLGGMDKV 184	
Qy	182 HINHGVDVIRPLPVPVQLFMPDVNRVPPFNTHRSIGEGFVYPTFPYNTGLCHLIHDCV 241	
Db	185 TIGDAEVRILPVVPLQNMFPDSRVIAFPFNCHRSIGENFTYPLPFFNRPLARLLPEAV 244	
Qy	242 IAPMAVALRVNTAVARGAAHLAFDENHEGAVLPDITYYFQSSSGSTTTARGARN 301	
Db	245 VGPAAVALRARNVDVARAAAHAFDENHEGALPADITFTAFASQG--KPORGAR--- 299	
Qy	302 VNSTSKPSGSGFERRLASIMAADTALHAENVFTNGIYEETPTDIKEWPMFIGMEGLPR 361	
Db	300 --DAGNKGPAAGFEQRLASVWAGDAALALBSIVSMVAVFDEPPDITITWPLLEGETPAAR 357	
Qy	362 LNALGSYARVAGVIGAMVFPNSALYLTVESDSGMTBAKGGPGPSNRRYQFAGPHLA 421	
Db	358 AGAVGAYLARAAGLVGMVFTNSALHLTEVDVDPADPKDHSK-PSFYRFLVPGTHVA 416	
Qy	422 ANPQTRDGHVL-----SSQSTGSSNTEFSDVLYALICGFGAPLLARLLFYLERCDAG 474	

Db 417 ANPQDRGHEVGEYGRTPALVGGTQ-EFAGEHLAMLCGFSALLAKLFLYLRCDGG 475
Qy 475 AFTGCHG-DALKYVTGTFSEPCSCKEKTRPVCAHTTVHRLQRMFRFGQATQPIGV 533
Db 476 VIVGRQEMDVFRVADSGQTDVPCNLCTETRHACATHTLMRLARHPKPAASAARGAIGV 535
Qy 534 FGTMSQYSDCDPLGNVAPYLIILKRGDQTEAAKATMDQTYRATLERLFDILEQERLLDR 593
Db 536 FGTMSAYSDCDVLGNVAFSAALKR-ADGSENTRTIMQETRYAATERVMAELEALQYVDQ 594
Qy 594 GAFCSSEGLSSVIVDHPTRFRILDTLRARIETQTTQFMKVLVETRDYKIREGLSEATHSM 653
Db 595 AVPTALGRLEITIIGNEALHTVNNIKQVDEVEQLMENLIEGRNFKFRDLAEANHAM 654
Qy 654 ALTFDYPYSGAFPIITNFLVKRTHLAVQDLALSOCHCVYQOQVEGRNFRNQFQVLR 713
Db 655 SLSDPYTCGCPCLLQALLARRSNLAVYQDLALSOCHGVFAGQSVGRNFRNQFQVLR 714
Qy 714 FVDLENGGFISTRITVTLSSEG-PVSAFNPTLGDAPAGRTFDGDLARVSVEVIRDIRVK 772
Db 715 VMDLFNNGFLSAGTLTVALSEGAACAPSUTAGTAPAESSEFGDVARVTILGFKELRVK 774
Qy 773 NRVSFGNCTNLSEAAARLVGLASAYQORQKRVDMHGLGFLKQFHLGFLLPFRGMPN 832
Db 775 SRVLFAGASANASEAAKARVASLQSAQYKQPKDVRDILLGLPLGFLKQFHAVIFPNK 834
Qy 833 SKSPNPOFWTLORNQMPADKLTHEETITTAQVKRFTVEEYAAINFILNPPCTICELAO 892
Db 835 SNOQPNQFWTALQRLNQLPARLLSREDIETIAFKRSLDYGAINFILNPNVSELAMY 894
Qy 893 YMANILKYCDHSOYLINTLSITGARRPRDPSSVLHWIRKDVTSAAIDETQAKALLEK 952
Db 895 YMANILKYCDHSOYLINTLSITGARRPRDPSSVLHWIRKDVTSAAIDETQAKALLEK 951
Qy 953 TENLPPELWTTAFTSTHLVRAAMNQRMVVLGISISKYHGAAGNNRVFQAGNWSGLNGKN 1012
Db 952 LDAHPGAWTSMFASCNLLRPVMAARPMVVLGLSISKYMGANDRYFQAGNWSGLNGKN 1011
Qy 1013 VCPLEFTRDRFRFIIACPRGGFTCPVTPGSSGNRETTLSDOVRIIIVSGAMVQLAIYAT 1072
Db 1012 ACPLIFDRTRKRVLCAPRAGFVCASSILGGGAHSLCEQLAGIITAEAGNAVASSVFA 1071
Qy 1073 VVRAVGARAHMAFDWLSITDDEFIARDLEELHQIIOLEPTWVEGAL-----BAVKI 1128
Db 1072 TVKSLGPRTOQLQIEDWLALLEDEYLSEEMMETTRALERGHGEWSTDAALEVAHEAL 1131
Qy 1129 LDEKTTAGDGETPNLAFNDSCEPSHDTTSNVLNLSGNSISGTVPLKRPEDDELFD 1188
Db 1132 VSQIGAAE-----VFNFGDFGDEDDHAASFGGLAAA--AGAAGVARKRAFGHDDPFG 1182
Qy 1189 LSGIPIKXGNITMEM 1203
Db 1183 -EGPPEKK-DLTLDM 1195

RESULT 4
US-10-237-551-200
; Sequence 200, Application US/10237551
; Publication No. US20030165820A1
; GENERAL INFORMATION:
; APPLICANT: Day, Craig H.
; APPLICANT: Hosken, Nancy A.
; APPLICANT: Parsons, Joseph M.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND
; TITLE OF INVENTION: TREATMENT OF HERPES SIMPLEX VIRUS INFECTION
; FILE REFERENCE: 210121.538C3
; CURRENT APPLICATION NUMBER: US/10/237,551
; CURRENT FILING DATE: 2002-09-06
; NUMBER OF SEQ ID NOS: 254
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 200
; LENGTH: 1196

; TYPE: BRT
; ORGANISM: HSV2
US-10-237-551-200
Query Match 47.9%; Score 3015.5; DB 14; Length 1196;
Best Local Similarity 49.0%; Pred. No. 2.5e-230;
Matches 595; Conservative 213; Mismatches 366; Indels 41; Gaps 16;
Qy 4 TQKTVVTPGTPLGVV--ACRVEDLDLEEISFLAARSTDSLDLALLPLMRNLTVKETTSS 61
Db 7 TTTTVKVPFGMGVYGRACPAEGLEL--LSLSARSGDADAVAPLIVGLTVESGFEAN 64
Qy 62 LAVVSGARTTGLAGAGITLKLTTSHFYSPVVFHGGKHLVLPSSAAPNLTRACNAARBF 121
Db 65 VAAVVGSRRTGLGCTAVSLKMLPMSHYSVSVVVFHGGHRLAPSTQAPNLTRLCERARPH 124
Qy 122 PSRCQGPVDAVTTGABICTRLGLEPENTILYLVLTALFKEAVFNCVFNHVGGLDI 181
Db 125 FADYAPRPCDLKHEITGDCALCERLGLDPRALLLVITTEGFREAVCISNTFLHGGMDK 184
Qy 182 HINHGDIVIRLFPVQVLPMPDVNRNLVPDPFNTHRSIGEGFVYPTPTFYNTGOLCHLI 241
Db 185 TIGDAEVRIRIVYPLQMFDPFSRVADPFCNHRHSIGENFNYPPLFRNRLARLLFEAV 244
Qy 242 IAPMAVALRVNVTAVARGAAHLAFDENHGAUPLPDIITYTYFOSSSGTITAGARRND 301
Db 245 VGPAVALRARNVDVARAAAHAFDENHGAALPADITETAFASQO--KPQGAR--- 299
Qy 302 VNSTKSPSGGFERRLASIMAAADTALHAENVITNGIYEETPTDIKEWPMFIMGEGLPR 361
Db 300 --DAGNKGPAFGPQRULASVWAGDAALALESIVSNVAFDEPPDITTWLLEGGQETPA 357
Qy 362 LNALGSYTRAVAGVIGAMVFPNSALYLTVEVDSGMTAKDGGPGSPFNRRYQFAGHLA 421
Db 358 AGAVGAYLARAAGLVGAMVFPSTNSALHLTEVDDAGPADPKDHSK-PSFYRFPFLVPG 416
Qy 422 ANPQDRGCHVL-----SSQSTGSSNTBESVDYLLALICGFGAPLLARLLFYLERCD 474
Db 417 ANPQDRGCHVVPVGEGRPTAPLVGGTQ-EFAGEHLAMLCGFSALLAKLFLYLRCDGG 475
Qy 475 AFTGCHG-DALKYVTGTFSEPCSCKEKTRPVCAHTTVHRLQRMFRFGQATQPIGV 533
Db 476 VIVGRQEMDVFRVADSGQTDVPCNLCTETRHACATHTLMRLARHPKPAASAARGAIGV 535
Qy 534 FGTMSQYSDCDPLGNVAPYLIILKRGDQTEAAKATMDQTYRATLERLFDILEQERLLDR 593
Db 536 FGTMSAYSDCDVLGNVAFSAALKR-ADGSENTRTIMQETRYAATERVMAELEALQYVDQ 594
Qy 594 GAFCSSEGLSSVIVDHPTRFRILDTLRARIETQTTQFMKVLVETRDYKIREGLSEATHSM 653
Db 595 AVPTALGRLEITIIGNEALHTVNNIKQVDEVEQLMENLIEGRNFKFRDLAEANHAM 654
Qy 654 ALTFDYPYSGAFPIITNFLVKRTHLAVQDLALSOCHCVYQOQVEGRNFRNQFQVLR 713
Db 655 SLSDPYTCGCPCLLQALLARRSNLAVYQDLALSOCHGVFAGQSVGRNFRNQFQVLR 714
Qy 714 FVDLENGGFISTRITVTLSSEG-PVSAFNPTLGDAPAGRTFDGDLARVSVEVIRDIRVK 772
Db 715 VMDLFNNGFLSAGTLTVALSEGAACAPSUTAGTAPAESSEFGDVARVTILGFKELRVK 774
Qy 773 NRVSFGNCTNLSEAAARLVGLASAYQORQKRVDMHGLGFLKQFHLGFLLPFRGMPN 832
Db 775 SRVLFAGASANASEAAKARVASLQSAQYKQPKDVRDILLGLPLGFLKQFHAVIFPNK 834
Qy 833 SKSPNPOFWTLORNQMPADKLTHEETITTAQVKRFTVEEYAAINFILNPPCTICELAO 892
Db 835 SNOQPNQFWTALQRLNQLPARLLSREDIETIAFKRSLDYGAINFILNPNVSELAMY 894
Qy 893 YMANILKYCDHSOYLINTLSITGARRPRDPSSVLHWIRKDVTSAAIDETQAKALLEK 952
Db 895 YMANILKYCDHSOYLINTLSITGARRPRDPSSVLHWIRKDVTSAAIDETQAKALLEK 951
Qy 953 TENLPPELWTTAFTSTHLVRAAMNQRMVVLGISISKYHGAAGNNRVFQAGNWSGLNGKN 1012

Db 952 LDAHPGAWTSMFASCNLLRPMVMAARPMVVLGLSLSKYGMAGNDRVFOAGNWSALLGGKN 1011
Qy 1013 VCPFLFTFDRTRERLIACPRGFFICPTVGPSSGNRETTLSDOVRGIIIVSGAMVQLAIYAT 1072
Db 1012 ACPLLIPTDRTRKRVLAACPRAGFVCAASSLGGGAHESLCEQLSGIIAEGGAASVSFVA 1071
Qy 1073 VVRVAGARAHMAFDWLSITDDLEFLARDUEELHDDQIIOTLETPWTEGAL----EAVKI 1128
Db 1072 TVKSLGPRTOQLQIEDWALLEDEYLSSEMMETTRALERHGHGEMSTDAALEVAHEAAL 1131
Qy 1129 LDEKTTAGDEPTNLAFNFDSCPSHDTTSNVLNIGSNISGTVPGIKRPPEDDELFD 1188
Db 1132 VSOLGAAGE-----VFNFGDFGDEDDHAASFGGLAAA--AGAAGVARKRAFPHGDDPFG 1182
Qy 1189 LSGIPKIKHGNITMEM 1203
Db 1183 -EGPPEKK-DLTLDM 1195

RESULT 5
US-10-237-551-232
; Sequence 232, Application US/10237551
; Publication No. US20030165820A1
; GENERAL INFORMATION:
; APPLICANT: Day, Craig H.
; APPLICANT: Hosken, Nancy A.
; APPLICANT: Parsons, Joseph M.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND
; TITLE OF INVENTION: TREATMENT OF HERPES SIMPLEX VIRUS INFECTION
; FILE REFERENCE: 210121.538C3
; CURRENT FILING DATE: 2002-09-06
; NUMBER OF SEQ ID NOS: 254
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 232
; LENGTH: 1196
; TYPE: PRT
; ORGANISM: Herpes simplex virus
US-10-237-551-232

Query Match 47.9%; Score 3015.5; DB 14; Length 1196;
Best Local Similarity 49.0%; Pred. No. 2.5e-290;
Matches 595; Conservative 213; Mismatches 366; Indels 41; Gaps 16;

Qy 4 TQKTVVTGTLGVY--ACRVEDLDEEISFLAARSTDSDLALLPMLNLTVEKFTTSS 61
Db 7 TTTTVKVPVPGMGVYGRACPAEGLEL--LSLLSARSADAVAPLIIVGLTVESGFAN 64
Qy 62 LAVVSGARTTGLACAGITLKTTSHEVPSVVFHGGKHLVPSAANLTRACNAARERFG 121
Db 65 VAAVVGSRITGLGTAVSLKMPSHSPSVYVFGKHLAPSTQAPNLTRLCERAPHFG 124
Qy 122 FSRQGPVVDGAVETTGAETICRLGLEPENTILYLVVTALFKBAVPMCNVFLHYGLDIV 181
Db 125 PADYAPRECDLKHETTDALCERGLDPRDRLVLYVITEGFREAVCISNTFLHGGMDKV 184
Qy 182 HINHGDIIRLPVQVLFMDVNLVDPDPTNTHRSIGEGFVYPTPTNTGLCHLHDCV 241
Db 185 TIGDAEYHRIYVPLQWFMEDFGRVIADPNCNHRSGENFNYPFLPFNRLPLARLLFEAV 244
Qy 242 IAPMAVALRVNTAVARGAAHLAFDENHGAVALPDDITVYFQSSSGSTTTARGARRND 301
Db 245 VGPAAVALRVNDVANAARAAHLAFDENHGAALPADITFAEASQG--KPQGRAR---299
Qy 302 VNSTKSPSGGFERRIASVAADTALHAENVNTGIYETPTDKEWPMFIOMETLPR 361
Db 300 --DAGNKGPPAGGFPQRLASVMAGDAALSALESIVSMVAFDPPDDITVPLLEGQETPAAR 357
Qy 362 LNALGSYAVAGVIGAMVSPNSALVLTVEVSGMTEAKDGGGSGSENFYQFAGPHLA 421
Db 358 AGAVGAYLARAAGLVGAMVSTNSALHTEVDAGPADPKDHSK-RSFYRFFLVPGTHVA 416

Qy 422 ANPOTDRDHVL-----SSQSTGSSNTEFSVDYLALICGFGAPLLARLLFYLERCDAG 474
Db 417 ANPQDRSHGVVPGVEGRTPAPLVGGTQ-EPAGEHLAMLCGFSALLAKMLFYLERCDGG 475
Qy 475 APTGHHG-DALKYVTGTFTDSSEIPCSLCEKHTRPVCAHTTVHRLRORMPRFOATQPTGV 533
Db 476 VIVRQEMDVTRYVADSCQTDPVNCNLTCTFTRHACATHTLMRLRARHPKPKASAARGALGV 535
Qy 534 FGTWMSQYSDCDPLGNVAPYLILIRKPGQOTAAKATMODTYRATLERLFDLEQERLDR 593
Db 536 FGTWMSAYSDCDVLGNVAAFSAKXR-ADGSENTRIMQETRYAATERVMAEALQYVDQ 594
Qy 594 GAPSCEGLSSVIVDHPPTFRILDTLRARIQOTTTQFMKVLVETRDYKIRGLSEATHSM 653
Db 595 AVPTALGLETIIGNREALHTVWNNIKQLVREVEQLMNTIEGRNFKFRDGLAEANAM 654
Qy 654 ALTEDPYSGAFCEITNPLVXTHLAVVODLALSOCHCVFYGOVEGRNFRNQFQVLRER 713
Db 655 SLSLDPYTCGCPCLLOLLARRNLAVYQDLALSOCHGVFAGQSVGEGRNFRNQFQVLRER 714
Qy 714 FVDLPNGGFISTRSTVTTLSEG-PVSAENPTLQDAPAGRTFDGLARVSVEVIRDIRVK 772
Db 715 VMDLFNNGFLSAKTLTVALSEGNAICAPSLTAGOTAPAESFEGDVARVTLGFPKELRVK 774
Qy 773 NRWFSNCTNLSEARARLVGLASAYQORQKRVDMHLGALGFLLKQFHGLLPFGMPEN 832
Db 775 SRVLFAGASANASEAKARVASLOSAYQKPKRVDDILLGLGLFLKQFHAVIPNPKPPG 834
Qy 833 SKSPNPQFWTLLQRNOMPADKLTHEEITTAAVKRFTEEYAAAINFINLPTCIGELAQF 892
Db 835 SNQPNQFWTALQRNQLPARLSREDIETIAFKRFSLDYGAINFINLAPNVVSELAMY 894
Qy 893 YVANILKYCHRSQYLINTLSITITGARRPDPSSVLHWIKVDVTSADTETQAKALLEK 952
Db 895 YMANQILRYCDHSTYFINTLTAVIAGSRPPSVQAAAAWAFQ---GGAGLEAGAFALMDS 951
Qy 953 TENPELMTTFTSTHLYRAAMNORPMVVLGISIKYHGAAGNNRVFOAGNWSGLNGKN 1012
Db 952 LDAHPGAWTSMFASCNLLRPMVMAARPMVVLGLSLSKYGMAGNDRVFOAGNWSALLGGKN 1011
Qy 1013 VCPFLFTFDRTRERLIACPRGFFICPTVGPSSGNRETTLSDOVRGIIIVSGAMVQLAIYAT 1072
Db 1012 ACPLLIPTDRTRKRVLAACPRAGFVCAASSLGGGAHESLCEQLSGIIAEGGAASVSFVA 1071
Qy 1073 VVRVAGARAHMAFDWLSITDDLEFLARDUEELHDDQIIOTLETPWTEGAL----EAVKI 1128
Db 1072 TVKSLGPRTOQLQIEDWALLEDEYLSSEMMETTRALERHGHGEMSTDAALEVAHEAAL 1131
Qy 1129 LDEKTTAGDEPTNLAFNFDSCPSHDTTSNVLNIGSNISGTVPGIKRPPEDDELFD 1188
Db 1132 VSOLGAAGE-----VFNFGDFGDEDDHAASFGGLAAA--AGAAGVARKRAFPHGDDPFG 1182
Qy 1189 LSGIPKIKHGNITMEM 1203
Db 1183 -EGPPEKK-DLTLDM 1195

RESULT 6
US-10-237-551-231
; Sequence 231, Application US/10237551
; Publication No. US20030165820A1
; GENERAL INFORMATION:
; APPLICANT: Day, Craig H.
; APPLICANT: Hosken, Nancy A.
; APPLICANT: Parsons, Joseph M.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND
; TITLE OF INVENTION: TREATMENT OF HERPES SIMPLEX VIRUS INFECTION
; FILE REFERENCE: 210121.538C3
; CURRENT FILING DATE: 2002-09-06
; NUMBER OF SEQ ID NOS: 254
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 231

Db 243 S 243

RESULT 8

US-10-156-761-9121

Sequence 9121, Application US/10156761

Publication No. US20030119018A1

GENERAL INFORMATION:

APPLICANT: OMURA, SATOSHI

APPLICANT: IKEDA, HARUO

APPLICANT: ISHIKAWA, JUN

APPLICANT: HORIKAWA, HIROSHI

APPLICANT: SHIBA, TADAYOSHI

APPLICANT: SAKAKI, YOSHIYUKI

APPLICANT: HATTORI, MASAHISA

TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES

FILE REFERENCE: 249-262

CURRENT APPLICATION NUMBER: US/10/156,761

CURRENT FILING DATE: 2002-05-29

PREVIOUS APPLICATION NUMBER: JP 2001-204089

PRIOR FILING DATE: 2001-05-30

PRIOR APPLICATION NUMBER: JP 2001-272697

PRIOR FILING DATE: 2001-08-02

NUMBER OF SEQ ID NOS: 15109

SEQ ID NO 9121

LENGTH: 850

TYPE: PRT

ORGANISM: Streptomyces avermitilis

US-10-156-761-9121

Query Match 2.0%; Score 123.5; DB 14; Length 850;

Best Local Similarity 20.5%; Pred. No. 0.046;

Matches 182; Conservative 104; Mismatches 327; Indels 273; Gaps 37;

QY 305 TSKPSPSGGEE-----RRLASINAAADTALHAEIFNTGIVEETPTDIKEPMFIMG 355

Db 3 TSRTPSAGAEPPSRPPVGRRAHAGQPADE-----DTGIDETTAASADSFPVAGR 54

QY 356 EGTLP-----LNALGSYARVAGVIGAMVFPNSALYTEVEDSGWTE 399

Db 55 WGVPRPTVRKIVCLLMVPPVLSLLAWY-----ATVSTAQDVARLQVQVDTTV 105

QY 400 AKDGGPGPSFNRFYQFAGPHLAANPQTDROGHVLSOSTGSSNTEFSDVIAL----ICG 455

Db 106 RAPVAAVAALQAERAAVHRVIDPSAEPD-----SGPRTLAARTDRAVDKRLGSHHTVA 161

QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKYVTGTFDSEIPCSLCEKHTRFVCAHTTVHR 515

Db 162 DGADLPACVPGRLTFVSGA-----EQLRSLRG-----AVLER 194

QY 516 LRQMPRPGQATROPIGVFGTMN--SQYSCDPLGNTPAYLILKPKGQDTEAAKATWQDT 573

Db 195 RARWDETFQVTRTIAAFAFGVGGALTIGQDAD-LGSDARVLL-----EFSRAGEALAQED 248

QY 574 YRATLERLFDLEOERL-LDRGAPCSSEGLS-SVIVDHPTRRILDTLRARIEQTTFQM 631

Db 249 AVLSSARLAGLDGERLRLFTGAVDTRTLTDSAVD-----LSERERAAWQGVATGRA 302

QY 632 KVLVETRDYKI---REGLESEATHSMALTFFD-----YSGAFCEPITN 669

Db 303 YADVTAEDKVLANKPGARRIAAQAOTWDPAHARVOEGMETIEADAGRGVADRDELTR 362

QY 670 FLVXETHLVQDIALSQCHVF-----YGOQVEGRFRNQFQVLRFRFVD----LFNG 720

Db 363 GLTTPAGAAVLFGAAVAASLVISVRIGRLVILSLISLNSALSIARLKLQAKMLKLAG 422

QY 721 GFISTRSTVTLSEGPSVAP-NPTLQDAPAGRTFDGLARVSVEVIRDIRKVRVPSG 779

Db 423 EEIDVR-----AEAPPGPAEDETQVAAELSVHRAALRAAVE-----461

QY 780 NCTNLSEARARLVGLASAYQKRVDMHLGALGFLKQHPHLLFPFGMPSPNSKPNQ 839

Db 462 -----RAELASGISGV-----472

Db 243 S 243

RESULT 8

US-10-156-761-9121

Sequence 9121, Application US/10156761

Publication No. US20030119018A1

GENERAL INFORMATION:

APPLICANT: OMURA, SATOSHI

APPLICANT: IKEDA, HARUO

APPLICANT: ISHIKAWA, JUN

APPLICANT: HORIKAWA, HIROSHI

APPLICANT: SHIBA, TADAYOSHI

APPLICANT: SAKAKI, YOSHIYUKI

APPLICANT: HATTORI, MASAHISA

TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES

FILE REFERENCE: 249-262

CURRENT APPLICATION NUMBER: US/10/156,761

CURRENT FILING DATE: 2002-05-29

PREVIOUS APPLICATION NUMBER: JP 2001-204089

PRIOR FILING DATE: 2001-05-30

PRIOR APPLICATION NUMBER: JP 2001-272697

PRIOR FILING DATE: 2001-08-02

NUMBER OF SEQ ID NOS: 15109

SEQ ID NO 9121

LENGTH: 850

TYPE: PRT

ORGANISM: Streptomyces avermitilis

US-10-156-761-9121

Query Match 2.0%; Score 123.5; DB 14; Length 850;

Best Local Similarity 20.5%; Pred. No. 0.046;

Matches 182; Conservative 104; Mismatches 327; Indels 273; Gaps 37;

QY 305 TSKPSPSGGEE-----RRLASINAAADTALHAEIFNTGIVEETPTDIKEPMFIMG 355

Db 3 TSRTPSAGAEPPSRPPVGRRAHAGQPADE-----DTGIDETTAASADSFPVAGR 54

QY 356 EGTLP-----LNALGSYARVAGVIGAMVFPNSALYTEVEDSGWTE 399

Db 55 WGVPRPTVRKIVCLLMVPPVLSLLAWY-----ATVSTAQDVARLQVQVDTTV 105

QY 400 AKDGGPGPSFNRFYQFAGPHLAANPQTDROGHVLSOSTGSSNTEFSDVIAL----ICG 455

Db 106 RAPVAAVAALQAERAAVHRVIDPSAEPD-----SGPRTLAARTDRAVDKRLGSHHTVA 161

QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKYVTGTFDSEIPCSLCEKHTRFVCAHTTVHR 515

Db 162 DGADLPACVPGRLTFVSGA-----EQLRSLRG-----AVLER 194

QY 516 LRQMPRPGQATROPIGVFGTMN--SQYSCDPLGNTPAYLILKPKGQDTEAAKATWQDT 573

Db 195 RARWDETFQVTRTIAAFAFGVGGALTIGQDAD-LGSDARVLL-----EFSRAGEALAQED 248

QY 574 YRATLERLFDLEOERL-LDRGAPCSSEGLS-SVIVDHPTRRILDTLRARIEQTTFQM 631

Db 249 AVLSSARLAGLDGERLRLFTGAVDTRTLTDSAVD-----LSERERAAWQGVATGRA 302

QY 632 KVLVETRDYKI---REGLESEATHSMALTFFD-----YSGAFCEPITN 669

Db 303 YADVTAEDKVLANKPGARRIAAQAOTWDPAHARVOEGMETIEADAGRGVADRDELTR 362

QY 670 FLVXETHLVQDIALSQCHVF-----YGOQVEGRFRNQFQVLRFRFVD----LFNG 720

Db 363 GLTTPAGAAVLFGAAVAASLVISVRIGRLVILSLISLNSALSIARLKLQAKMLKLAG 422

QY 721 GFISTRSTVTLSEGPSVAP-NPTLQDAPAGRTFDGLARVSVEVIRDIRKVRVPSG 779

Db 423 EEIDVR-----AEAPPGPAEDETQVAAELSVHRAALRAAVE-----461

QY 780 NCTNLSEARARLVGLASAYQKRVDMHLGALGFLKQHPHLLFPFGMPSPNSKPNQ 839

Db 462 -----RAELASGISGV-----472

Db 243 S 243

RESULT 8

US-10-156-761-9121

Sequence 9121, Application US/10156761

Publication No. US20030119018A1

GENERAL INFORMATION:

APPLICANT: OMURA, SATOSHI

APPLICANT: IKEDA, HARUO

APPLICANT: ISHIKAWA, JUN

APPLICANT: HORIKAWA, HIROSHI

APPLICANT: SHIBA, TADAYOSHI

APPLICANT: SAKAKI, YOSHIYUKI

APPLICANT: HATTORI, MASAHISA

TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES

FILE REFERENCE: 249-262

CURRENT APPLICATION NUMBER: US/10/156,761

CURRENT FILING DATE: 2002-05-29

PREVIOUS APPLICATION NUMBER: JP 2001-204089

PRIOR FILING DATE: 2001-05-30

PRIOR APPLICATION NUMBER: JP 2001-272697

PRIOR FILING DATE: 2001-08-02

NUMBER OF SEQ ID NOS: 15109

SEQ ID NO 9121

LENGTH: 850

TYPE: PRT

ORGANISM: Streptomyces avermitilis

US-10-156-761-9121

Query Match 2.0%; Score 123.5; DB 14; Length 850;

Best Local Similarity 20.5%; Pred. No. 0.046;

Matches 182; Conservative 104; Mismatches 327; Indels 273; Gaps 37;

QY 305 TSKPSPSGGEE-----RRLASINAAADTALHAEIFNTGIVEETPTDIKEPMFIMG 355

Db 3 TSRTPSAGAEPPSRPPVGRRAHAGQPADE-----DTGIDETTAASADSFPVAGR 54

QY 356 EGTLP-----LNALGSYARVAGVIGAMVFPNSALYTEVEDSGWTE 399

Db 55 WGVPRPTVRKIVCLLMVPPVLSLLAWY-----ATVSTAQDVARLQVQVDTTV 105

QY 400 AKDGGPGPSFNRFYQFAGPHLAANPQTDROGHVLSOSTGSSNTEFSDVIAL----ICG 455

Db 106 RAPVAAVAALQAERAAVHRVIDPSAEPD-----SGPRTLAARTDRAVDKRLGSHHTVA 161

QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKYVTGTFDSEIPCSLCEKHTRFVCAHTTVHR 515

Db 162 DGADLPACVPGRLTFVSGA-----EQLRSLRG-----AVLER 194

QY 516 LRQMPRPGQATROPIGVFGTMN--SQYSCDPLGNTPAYLILKPKGQDTEAAKATWQDT 573

Db 195 RARWDETFQVTRTIAAFAFGVGGALTIGQDAD-LGSDARVLL-----EFSRAGEALAQED 248

QY 574 YRATLERLFDLEOERL-LDRGAPCSSEGLS-SVIVDHPTRRILDTLRARIEQTTFQM 631

Db 249 AVLSSARLAGLDGERLRLFTGAVDTRTLTDSAVD-----LSERERAAWQGVATGRA 302

QY 632 KVLVETRDYKI---REGLESEATHSMALTFFD-----YSGAFCEPITN 669

Db 303 YADVTAEDKVLANKPGARRIAAQAOTWDPAHARVOEGMETIEADAGRGVADRDELTR 362

QY 670 FLVXETHLVQDIALSQCHVF-----YGOQVEGRFRNQFQVLRFRFVD----LFNG 720

Db 363 GLTTPAGAAVLFGAAVAASLVISVRIGRLVILSLISLNSALSIARLKLQAKMLKLAG 422

QY 721 GFISTRSTVTLSEGPSVAP-NPTLQDAPAGRTFDGLARVSVEVIRDIRKVRVPSG 779

Db 423 EEIDVR-----AEAPPGPAEDETQVAAELSVHRAALRAAVE-----461

QY 780 NCTNLSEARARLVGLASAYQKRVDMHLGALGFLKQHPHLLFPFGMPSPNSKPNQ 839

Db 462 -----RAELASGISGV-----472

QY 840 WFTLLORNOPADKLTHERITIAAVKRTTEBYAAINFINLPTTCIGELAQFYMANLIL 899
 Db 473 -FVNLAERSQI-----LVHRQLSLDSMRSESD-----PNLSOL--FRLDHLLT 515
 QY 900 KYCDHSHOYLNTLTSITGA---RRPRDPSSVLHWIRKDVTSAAD---IETQ----- 945
 Db 516 RMRPHASLI-----ILSGAPGAEATMPVSLTNVRAAASEVEDYARVEVRQLPEASVV 570
 QY 946 AKALLEKTENLPELWTTA---FTSTHLVRAAMNORP-----MVLGIGISIKYHGAAGN 995
 Db 571 GAAVADLTHLMAETVENAASFPPH--TRVRVTGEPVNGVAYVEDRGLGMGKETLAEAN 629
 QY 996 NRVPQAGWSGLNGKVCPLFTFDRTRRILIA-----CPRGGFICPVTGP 1041
 Db 630 RRIEQS-----BALDLFSDRLGLFVSVRLAARHGKIKVHLRTSPYGGTTAVVLLP 679
 QY 1042 S-----SGNRETT--LSPQVRGIIYSGGAMVQLAIYATVWRAVGARA 1081
 Db 680 TALLHSGTAERVPRPAADTGRD--ABPAYARVAASHQSVQQAAGRPA 724
 RESULT 9
 US-10-454-351-34
 ; Sequence 34, Application US/10454351
 ; Publication No. US20040053301A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Quark Biotech Inc.; Paz Einat, et al
 ; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
 ; FILE REFERENCE: 010/PCT-US2; EINAT=7E
 ; CURRENT APPLICATION NUMBER: US/10/454,351
 ; CURRENT FILING DATE: 2003-06-04
 ; PRIOR APPLICATION NUMBER: US 09/991,630
 ; PRIOR FILING DATE: 2001-11-06
 ; PRIOR APPLICATION NUMBER: US 09/905,129
 ; PRIOR FILING DATE: 2001-07-13
 ; PRIOR APPLICATION NUMBER: US 09/802,318
 ; PRIOR FILING DATE: 2001-03-08
 ; PRIOR APPLICATION NUMBER: US 09/729,485
 ; PRIOR FILING DATE: 2000-12-04
 ; PRIOR APPLICATION NUMBER: US 09/312,216
 ; PRIOR FILING DATE: 1999-05-14
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 34
 ; LENGTH: 2597
 ; TYPE: PRT
 ; ORGANISM: Rattus rattus
 US-10-454-351-34
 Query Match 2.0%; Score 123.5; DB 12; Length 2597;
 Best Local Similarity 18.6%; Pred. No. 0.33;
 Matches 145; Conservative 114; Mismatches 286; Indels 233; Gaps 40;
 QY 416 AGPHLAANPQTD--RDGHVLSQSQTGSGN-----TEFSVDVIALICG 455
 Db 274 SCAGFLCTKPTIDPSLSKSLVTOEDNGASTSPQDFIEPFGSLNLMNTDLSGNKADMYCS 333
 QY 456 FGAPILARLLFYLERCDAGFTGHDGALKVYVGTGFDSEIPCSLCEKHTRPV---CAHT 511
 Db 334 IOKP-----SRTSPTAFTEENDYM--LNASFSTNLVCSVDYNIHQPWQALLAYS 382
 QY 512 TVHRLRQRM-----RFGQATROPIGVGTWNSQYSCDPLGNVAPYLILRKEGD 561
 Db 383 DSPILLERKPOLTEPFLSSRYKQVALRPEDIFTSIADVR--ADPFWFQEKIVQLNRT 441
 QY 562 QTEAAKATWQTYRATLERLFDLQERL-----LDR-----GAPCSSEG 601
 Db 442 ATTLSTLOIQFSTQDAQIALPRAEMRAERLKWMLAMNNPKLERTVLVGGTIALSCPGK 501
 QY 602 -----LSSVIVDHPTR-----RIIDLTLRAIE-QTTQFMKVL---VETRD----- 639

Db 502 DPSHLEWLLADGSKVRAPYVSEDRILIDKNGKLEQLQADSFDAGLYHCISTNDADAV 561
 QY 640 --YKIR--EGISEATHSWALTFDPYSGAF-----CPITNFKRTHLAVVQDLALSOCHCV 691
 Db 562 LTYRITVVEPYGESHDSGVQHTVVGTETLDPCLSTG-----VPDASIS--WI 608
 QY 692 FYGQOVEGRNFANQOPVLRFRFVDLFNGGFISTRSITVTLSEGPVS--ANPT----- 743
 Db 609 LFGNTVFSQPSRDR-----QILNNGTLRLQVT--PKDQGHYQCVAAANPSGADFSS 657
 QY 744 -----LGODAPAGRTFDCDLARVSVEVIRDIRVKNRVVFSNGCNTLSLSEAAAR 791
 Db 658 FKVSQVKQKQVRVHEDREAGSGGLGE--PNSVSLKQPSALK-----LSASALTGSAGQK- 711
 QY 792 LVGLASAYQOERKRYDMLHGLG--FLKQFHGLLFPFGMPNPSKSPNQWFWTLQO---R 847
 Db 712 ----VSGVHRKKNKRDLIHRRRGDSTLRRFRE--HRRQLPLSARRIDPQWMAALLEKAKK 765
 QY 848 NOMPADKLTHERITT-----IAVKRFTTEYAAINFINLPTTCIGELAQFYMANLIL 900
 Db 766 NSVP-----KKQENTTVKVPVLAFLVELTDEEKDASGMI--PP----- 802
 QY 901 YCDHSHOYLNTLTSITGARRPRDPSSVLHWIRKDVTSAAADIETQAKALLEKTENLPELW 960
 Db 803 --DEEFMWLTKKASGVGRSPADSGPVNHGFWTSIAGTEVSTVYNPOTLQ--SEHLPDFK 859
 QY 961 TTAFTSTHLVRAAM-----NORPMVVLGIGISIKYHGAAGNKNRVFOAGNWSG-- 1006
 Db 860 LFSVINGTAVTKSMNPSTASKIEDTNNQNPFIIFP--SVAEIRDSA-----QAGRASSQS 912
 QY 1007 ---LANGKNVCPLFIFDRTRRILIAACPRGGFI-----CPVTG---PSSGN 1045
 Db 913 AHPVTGNN---MATYGHNTYSSFTSKASTVQZQINPTESYGPQIPITGVSRPSSD 966
 RESULT 10
 US-10-206-576-358
 ; Sequence 358, Application US/10206576
 ; Publication No. US20030017495A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Choi et al.
 ; TITLE OF INVENTION: Enterococcus faecalis Polynucleotides and Polypeptides
 ; NUMBER OF SEQUENCES: 497
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Human Genome Sciences, Inc.
 ; STREET: 9410 Key West Avenue
 ; CITY: Rockville
 ; STATE: Maryland
 ; COUNTRY: USA
 ; ZIP: 20850
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: CD-R
 ; COMPUTER: Dell Latitude
 ; OPERATING SYSTEM: Windows 98
 ; SOFTWARE: ASCII Text
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/10/206,576
 ; FILING DATE: 29-Jul-2002
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 09/071,035
 ; FILING DATE: 1998-05-04
 ; APPLICATION NUMBER: US 60/046,655
 ; FILING DATE: 1997-05-16
 ; APPLICATION NUMBER: US 60/044,031
 ; FILING DATE: 1997-05-06
 ; APPLICATION NUMBER: US 60/066,009
 ; FILING DATE: 1997-11-14
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Hyman, Mark J
 ; REGISTRATION NUMBER: 46,789
 ; REFERENCE/DOCKET NUMBER: PB369P1DI
 ; INFORMATION FOR SEQ ID NO: 358:


```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 1074 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 358:
US-10-206-576-358

Query Match
  2.0%; Score 123; DB 12; Length 1074;
Best Local Similarity 18.3%; Pred. No. 0.078;
Matches 206; Conservative 150; Mismatches 415; Indels 352; Gaps 52;

QY 250 RVRNVTAVARGAAHLAFDENHEGAVLPDPITYTFQSSSGTGTARGARRNDVNSTSKPS 309
DB 67 RTTSLYAEVNGAKQVFC-IEPGVSIPTVTHGY-----QKNPL 104

QY 310 PSGGFERRLASIM--AADTALHAEVINTGIVBE-----TPTDIKWPMPFI 353
DB 105 PMSDRAKLVSVLWEXAGTDIDTNVAQKMIWEVNGYKLSIKRGGASVDIK-----158

QY 354 GMEGTLPRNLALSYTAR-----VAGVIG-AMVSPNSALYLTEVEDSGMTEAKDGCP 405
DB 159 SIEGKINK--AIEYOKKPSFHNVTVKTLIGQSTTLIDKNEMLSEFDKVVONTA-----211

QY 406 GPSFNRFYQAGPHLAANPOTDRDGHVLSQSSTGSSNTBFSVDYLALICGFGAPLIARLL 465
DB 212 ----NIDYRVIGNQLVLP-----NNSKSGTLTLKKSAGTGTP-VAYKK 251

QY 466 FYLERCDAGFTGGHGDALKYVTGTFDSEIPCLCEKHTRPVCAHTVHRLRQRPFCQ 525
DB 252 AGLQTVMAGALDKPNTYAIKINVTETGSS-LKIKKIDKESGDIVPVTVPHL-----DFGK 304

QY 526 A-----TROPIGVFGTMSQYSDCPLGNVA-----PYLILRKPGDOTEAAKATM 570
DB 305 ALPSKDVTTDKGI-----SILDGPHGKTKVITEKSVDPDKYIDTTPWATIKAGETI 358

QY 571 QDTRATLERLFDLEQERLLDRGAPCSSEGLS-----SVIVDHPT---FRILDTLRA 621
DB 359 SMTSKMRQKGQILLEKTG-VETGTDLWINDNYSLAGNTFAIRKDSPAGEIVQEIITDDEG 417

QY 622 RIQTITQPMKLVETRDYKIREGLSEATHSMALTFDP-----YSGAFCTINFLVKET 675
DB 418 RAE--TPKELANALELGTYYTVE--TKSSNGFNTFKPKVVELKXANQVALVTSNVKQ 473

QY 676 HLAVVDLAL-----SOCHCVFYGQOV-----EGNFRNQFPQVLRFRFVDL 717
DB 474 NQBITGETTITKEDKDTGNESQKAEFGAEYTLFTAKDQQAQVWSEAFK-----TEL 526

QY 718 FNGGFSTRSITVTLSB-GPVSAFNPTLQ-----DAPGRFPDGLARVSVE-----764
DB 527 VKGTRASDETVTLALDEKNQAVKVLAINIEYFQWETKAPEGYTLDKTYFVSIKKVDNNE 586

QY 765 ----VIRDIRVKRVV-----FSGNCTNLSEAA-----RARLVGLASAYQREKR 805
DB 587 KNAVIRDTVTAQVIRFGDFPFKAGSADGTAETGNDLSFKVSPLEGTXEITGAEDKA 646

QY 806 VDMHLGALGF-----LKKQFHGLLPFRGM-----PPNSKS-----PNP 838
DB 647 TTACNEQLGDFGDKFENLPYGYLLIEIEA-----PEGFQKITLEIRSTFKENKODYAKS 703

QY 839 QWFTLLORNQ-----MPADKLTHEITIAAVKRFTVEEYAAINFNLNLP--PTCIGE 888
DB 704 EYVFTITEEQKQPIKAVTVPEYKLTNE-----FSVSLNRLMLDYLPEKEDSLTS 754

QY 889 LAQFYMANLILKYCDHSQYILNTLTSITGARRPRDPSSVLHWIRKD-----VTSAAIDFTQ 945
DB 755 LATWKDGNKKLNTLDFTL-LVDKLV-----RYNLHEIKEDWYVVAQIDVEA- 799

QY 946 AKALLEKTENLPWLTAFTST-----HLVRAAMQRPMPVVLGISISKYHGA 992
DB 800 TKAAQEKDEKAKPVVIAETATLANKEKTGKILHKLTAEQ-----VLDKSLVLFNTV 853

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QY 993 AGNNRVFOAGNWSGLNGKNCVPLFTFDRTRRFFIACPRGGFICPVTGPSSGNRETTLS 1052
DB 854 YENKVAFEAGNE-----PVA-----KASLNN 875

QY 1053 QVRGIIVSGGAMVOLAIYATVAVARGA-----AQMADFDDWLSLTDDEFLARDL-- 1102
DB 876 QAQ-----TVNCTIERHVSITQKHALEDGSGTFTGDMVDMDFDVSVTHDVL 923

QY 1103 --BELHDOIOTLETPTWTVGSAEAVKILDE-----KTAGD-----GETPTNLAFNFD 1149
DB 924 GSKAFETILVALLPDGTNKEINWKGKIEHVNDKEFTKTVLAEKVDTGKYPGKTETTF- 982

QY 1150 SCEPSHDTTSNV-----LNISGNSISGSTVPGPKRPEDDE 1185
DB 983 -TEINYEKDGNVNGKHNEDLKEKSTLTLPKEVPTIPSTPKQPE 1024

RESULT 11
US-10-206-576-394
; Sequence 394, Application US/10206576
; Publication No. US20030017495A1
; GENERAL INFORMATION:
; APPLICANT: Choi et al.
; TITLE OF INVENTION: Enterococcus faecalis Polynucleotides and Polypeptides
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESS: Human Genome Sciences, Inc.
; STREET: 9410 Key West Avenue
; CITY: Rockville
; STATE: Maryland
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-R
; COMPUTER: Dell Latitude
; OPERATING SYSTEM: Windows 98
; SOFTWARE: ASCII Text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/206,576
; FILING DATE: 29-Jul-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/071,035
; FILING DATE: 1998-05-04
; APPLICATION NUMBER: US 60/046,655
; FILING DATE: 1997-05-16
; APPLICATION NUMBER: US 60/044,031
; FILING DATE: 1997-05-06
; APPLICATION NUMBER: US 60/066,009
; FILING DATE: 1997-11-14
; ATTORNEY/AGENT INFORMATION:
; NAME: Hyman, Mark J.
; REGISTRATION NUMBER: 46,789
; REFERENCE/DOCKET NUMBER: PB369P1D1
; INFORMATION FOR SEQ ID NO: 394:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1074 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 394:
US-10-206-576-394

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Query Match
  2.0%; Score 123; DB 12; Length 1074;
Best Local Similarity 18.3%; Pred. No. 0.078;
Matches 206; Conservative 150; Mismatches 415; Indels 352; Gaps 52;

QY 250 RVRNVTAVARGAAHLAFDENHEGAVLPDPITYTFQSSSGTGTARGARRNDVNSTSKPS 309
DB 67 RTTSLYAEVNGAKQVFC-IEPGVSIPTVTHGY-----QKNPL 104

QY 310 PSGGFERRLASIM--AADTALHAEVINTGIVBE-----TPTDIKWPMPFI 353

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Db 105 PMSDKAKLVSLWEKAGTDIDTMMVAKQMIWEVNGYKLSIKRIGASVDIK----- 158
 Qy 354 GMEGLTPELNALGSYAR-----VAGVIG-AMVFPENSALYLTVEDESGMTEAKDGGP 405
 Db 159 SIEGKINK--AIEEYQKPSFHTTAKILQSTTLIDKNELNLSFEDKVVQNTA----- 211
 Qy 406 GPSNRFQFAGPHLAANPQDRGHVLSSTSGSNTSFSDVYALICGFGAPLLARLL 465
 Db 212 ----NIDRVIGNQLVLT-----NSNSKSGTTLKKSAGTGP-VAYKK 251
 Qy 466 FYLERCDAGATGGHGDALKVYTGTFDSEIPCSICEKHTREVCAHTVHRLRQMRPFQ 525
 Db 252 AGLQTVAGALDKPNTYAIKINVTKGS-LKIKKIDKESGDIVETVPHL-----DFGK 304
 Qy 526 A-----TRQIGVFTWNSQYSDCPGNTA-----PYLLRKPQDTEAAKATM 570
 Db 305 ALPSKDVTTDKGI-----SILDGIPHGKTKVITEKSVDPYPMIDTTPMAATKAGETI 359
 Qy 571 QOTVRATLERLFDLEQBRLLDRGAPCSSEGLS-----SVIVDHT-----PRRILDTIRA 621
 Db 359 SNTSKMKGQQLLEKTG-VETGTDLNDVSLAGNTFAIRKDSPAGEIVQEITTDK 417
 Qy 622 RIBQTTQFMKVLVETRYKIREGLSEATHSMALTFDP-----YSGAFCDITHFLVKRT 675
 Db 418 RAE--TPKELANALELGTYYVTE--TKSNGFVNTFKTKVELKYANQTVALTNSVKGQ 473
 Qy 676 HLAVVQDLAL-----SOCHCVFYGOQV-----EGRNPNFOFQVLRFRFVDL 717
 Db 474 NOEITGETTLKEDXDGTGNSGCKAEFKGAEYTLFTAKDGGQAVKWSAEFK-----TEL 526
 Qy 718 FNGGFISTRITVITLSE-GPVSAPNPTLQ-----DAPAGTFPGDLARVSVE----- 764
 Db 527 VKGTRASDETITLALDEKNQVAKELAINEXFWQTKAPEGYTLDETYPVSIKKVDNNE 586
 Qy 765 ----VIRDIRQVRV-----FSGNCTNLSEAA-----RARIYGLASAYORQER 805
 Db 587 KNAVITRDVTAKEQVIRFGDFPFKAGSADGTAETFNDSFKVSPLEGTEKITGAEDKA 646
 Qy 806 VDLMLGALGF-----LLKQPHGLLPPRGM-----PPNSKS-----PNP 838
 Db 647 TTACNEQLGDFGKXFNLPYGDYLLERIEA--PEGQKITPLRSTFKENKDDYAKS 703
 Qy 839 QMFWTLLQRN-----MPADKLTHERIITIAAVKPTFEYAAINFILP--PTCIGE 888
 Db 704 EVVFTITERGQKQPIKMTVPVYEKLTTNE-----FVSLNRLMLYDLPEKEDSLTS 754
 Qy 889 LAQFYMANLLKYCDHSQVLYNTLSIITGARRPRDPSVHLHWIKD---VTSAADIEQ 945
 Db 755 LATWKDGNKKLNTLDPE-LVDKL-----RYNLHEIKEDWVVAQAIDVEA- 799
 Qy 946 AXALLEKTENLPETLWTTAFTST-----HLVRAAMNQRPMVVLGISISKYHGA 992
 Db 800 TKAAQEKDEKAPVIVIAETATLANKEKTGWLKHLTAEQ-----VLDKSIVLFNIV 853
 Qy 993 AGNRFQAGNWSGLNGKGNVCPLETFDTRFRITACPRGGICVGTGSSGNRETTISD 1052
 Db 854 YENKVAFAEGNE-----PVA-----KOASLNN 875
 Qy 1053 QVRGIIVSGGAMVQLAIYATVAVAGAR-----AQHMAFDLWLSLTDDEFLARDL-- 1102
 Db 876 QAQ-----TVNCTIERHVSIOQKAHLEDGSGTFFHGDVMDPDDVSVDHVD 923
 Qy 1103 --BELHQIQTLETPTWVEGALAEVILDE-----KTTAGD-----GETTNLAFNPD 1149
 Db 924 GSKEAFETILYALLPDGINKIWKSGKIEHVENDKFEFTKVLAEKVDGTGKPEGKFTF- 982
 Qy 1150 SCEPSSHDTSNV-----LNSGNSISGSTVPGKRPPEDEE 1185
 Db 983 -TEINYKODGNVNGKNEDELEKESQTLTKPEVPTIPSTPKQE 1024

RESULT 12

US-10-282-122A-45763
 ; Sequence 45763, Application US/10282122A
 ; Publication No. US20040029129A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Wang, Liangsu
 ; APPLICANT: Zamudio, Carlos
 ; APPLICANT: Malone, Cheryl
 ; APPLICANT: Haselbeck, Robert
 ; APPLICANT: Ohlsen, Kari
 ; APPLICANT: Zyskind, Judith
 ; APPLICANT: Wall, Daniel
 ; APPLICANT: Trawick, John
 ; APPLICANT: Carr, Grant
 ; APPLICANT: Yamamoto, Robert
 ; APPLICANT: Forsyth, R.
 ; APPLICANT: Xu, H.
 ; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
 ; FILE REFERENCE: ELITRA.034A
 ; CURRENT APPLICATION NUMBER: US/10/282,122A
 ; CURRENT FILING DATE: 2003-02-20
 ; PRIOR APPLICATION NUMBER: 60/191,078
 ; PRIOR FILING DATE: 2000-03-21
 ; PRIOR APPLICATION NUMBER: 60/206,848
 ; PRIOR FILING DATE: 2000-05-23
 ; PRIOR APPLICATION NUMBER: 60/207,727
 ; PRIOR FILING DATE: 2000-05-26
 ; PRIOR APPLICATION NUMBER: 60/230,335
 ; PRIOR FILING DATE: 2000-09-06
 ; PRIOR APPLICATION NUMBER: 60/230,347
 ; PRIOR FILING DATE: 2000-09-09
 ; PRIOR APPLICATION NUMBER: 60/242,578
 ; PRIOR FILING DATE: 2000-10-23
 ; PRIOR APPLICATION NUMBER: 60/253,625
 ; PRIOR FILING DATE: 2000-11-27
 ; PRIOR APPLICATION NUMBER: 60/257,931
 ; PRIOR FILING DATE: 2000-12-22
 ; PRIOR APPLICATION NUMBER: 60/267,636
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: 60/269,308
 ; PRIOR FILING DATE: 2001-02-16
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 78614
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 45763
 ; LENGTH: 2358
 ; TYPE: PRT
 ; ORGANISM: Bacillus anthracis
 ; US-10-282-122A-45763

Query Match 1.9%; Score 121; DB 12; Length 2358;
 Best Local Similarity 18.7%; Pred. No. 0.5;
 Matches 266; Conservative 178; Mismatches 517; Indels 464; Gaps 65;
 Qy 57 TFTSSLAIVSGARTTGLAGAGITLKLTTSHFVPSVFFHGGKHLVPSAAPNLTRACNAA 116
 Db 520 TFVANSVIVNGVARPG-ANPASSINLGSINASQTTVV-----RFQVRVTSNPLVNPENRA 574
 Qy 117 RERFGFSRCQ-PPVDG-----AVETT--GAETCTRLGLEP-----ENTI 153
 Db 575 SATFTFTVPQVQVSGQATSNVTVTINADIRTKRIVDRAPATVNDVLTYYTIENTG 634
 Qy 154 LYLVTVALFKEAVFMCNVFLHYGLDVIHINHGVDIRIPLFPVOLFMFDPVNRNLPDPFNT 213
 Db 635 NVLATNVVFPQPIGTTFTI-TNSVTVDVGSQPCANPATGFTVANISFGGSRTV--TFQV 691
 Qy 214 HRSIGEGFVPTFPYNTGLCHLDVCIAPMAVALVRN-----VTAVARGAAHLAPDE 268
 Db 692 RVTSPTSGGTIF-----NRG--NVTANFVFPNQPPIITINRQTNVTQVNTGGLNVIKEV 745
 Qy 269 NHEGAVLPDDITYT-----YFOSSSS-----GTTTARGARNVDNSTSK 307
 Db 746 NTOQAVGDTLTYTIIAVQNTGNVPLTNVFFQDAISSAVSFVANSVTINGVPSQGLN---- 801

Db 712 ----VSGVHRKNKRDLIHRRRGDSTLRRPRE--HRRQLPFSARRIDPQWAALEKAKK 765

Qy 848 NOMPADKLTHERIT--IAAVKRFTEYAAINFILNPTTCIGELAQFYMANLILK 900

Db 766 NSVP----KKQENTTKVPPLAVPLVLTDEEKDASGM--PP-----802

Qy 901 YCHDSOYLINTLSITGARRPRDPSSVLHWIRKDVTSAAADIETQAKALEKTENLPELW 960

Db 803 --DEEFVWLTKASGVPGSRPTADSGPVNHGFMSTIASGTEVSTVNPQTQ--SEHLPDFK 859

Qy 961 TTAFTSTHLVRAM-----NORPMVLGISISKYHGAAGNRRVFOAGNWSG--1006

Db 860 LFSVTNGTAVTKSMNPSIAKIEDTTNQNPILIFP--SVAEIRDSA-----QAGRASSQS 912

Qy 1007 ---LNGGKNVCPPLFTFDRTRERFIACPRGGFI-----CPVTG--PSSGN 1045

Db 913 AHPVTGNN---MATYGHNTYSSFTSKASTVLQPINPTESYGPQIPITGVSRPSSD 966

RESULT 14

US-09-905-129-10

Sequence 10, Application US/09905129

Patent No. US20020137705A1

GENERAL INFORMATION:

APPLICANT: Einat, et al

TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE

TITLE OF INVENTION: AND USES THEREOF

FILE REFERENCE: 540579-2007.2

CURRENT APPLICATION NUMBER: US/09/905,129

CURRENT FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: 09/802,318

PRIOR FILING DATE: 2001-03-08

PRIOR APPLICATION NUMBER: 60/207,821

PRIOR FILING DATE: 2000-05-30

PRIOR APPLICATION NUMBER: 60/084,944

PRIOR FILING DATE: 1998-05-11

PRIOR APPLICATION NUMBER: 60/085,673

PRIOR FILING DATE: 1998-05-15

NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patent in version 3.0

SEQ ID NO 10

LENGTH: 2597

TYPE: PRT

ORGANISM: Rattus sp.

FEATURE:

NAME/KEY: misc_feature

LOCATION: (1)..(2597)

OTHER INFORMATION: 'x' can be any amino acid

US-09-905-129-10

Query Match 1.9%; Score 120.5; DB 9; Length 2597;

Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;

Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

Qy 416 AGPHLAANPQTD---RDGHVLSQSQTSSNTE-----FSDVYLALICG 455

Db 274 SGAFCTKPTIDPSLKSKSLVTQEDNGSASTSPQDFTPEFGSLSLNMTXXSGNKADMVCS 333

Qy 456 FGAPLLARLLFYLERCDAGFTGGHGDALKYVCTGTFDSEIPCSLCEKHTRPV---CAHT 511

Db 334 IQKP-----SRSTPTAFTENDYIM--LNASFSTNLVCSVDYNHQIPVWOLLALYS 382

Qy 512 TVHRLRQMP-----RFGQATROPIGVFTGTMNSQYSDCDPLGNVAPYLILRPGD 561

Db 383 DSPILERKPOLTEPSSLSEYKQVALRPEDIFTSIEADVR-ADPFWFQEKIVLQLNRT 441

Qy 562 QTEAAKATMQTYRATLERFIDLEQRL-----LDR-----GAPCSSEG 601

Db 442 ATTLSLTIQPSDQAIALPRAEMRBLKWTMLMNNPKLERTVLVGGTIALSCPGKG 501

Qy 602 ----LSSVIVDHETFR-----RIIDLRLARIE-OTTQFMKVL---VETRD-----639

Db 502 DPSPHLEWLLADGSKVRAPYVSEGRILIDKNGLKLEQMAQDSFDAGLYHCISTNDADAV 561

Qy 640 --YKIR--EGLSEATHSMALTFDPYSGAF-----CPITNFLVKRTHLAVVQDLALSCQHCV 691

Db 562 LTYRITVVEPYGESHTDSGVQHTVVTGETLDLPCLSTG-----VPDASIS--WI 608

Qy 692 FYGQOQVEGFNRNQPVLRFRFVDFNGGGFISRTSITVTLSEGPVS--APNPT-----743

Db 609 LFGNTVFSQPSRDR-----QILNNGTLRIILQVT--PKDQGHYQCVAAANPSGADFSS 657

Qy 744 ----LGQDAPAGRTFDGDLARVSEVIRDIRVKNRVVFSNGNCTNLSEAAAR 791

Db 658 FKVSQVQKQORVVEHREAGGSLGE--PNSSVSLAQPASLK-----LSASALTGSEAGKQ- 711

Qy 792 LVGLASAVORQEKRVDMHLGALG--FLKQFHGLLPFRGMPNPNKSPNQWFWTLIQ--R 847

Db 712 ----VSGVHRKNKRDLIHRRRGDSTLRRPRE--HRRQLPFSARRIDPQWAALEKAKK 765

Qy 848 NOMPADKLTHERIT--IAAVKRFTEYAAINFILNPTTCIGELAQFYMANLILK 900

Db 766 NSVP----KKQENTTKVPPLAVPLVLTDEEKDASGM--PP-----802

Qy 901 YCHDSOYLINTLSITGARRPRDPSSVLHWIRKDVTSAAADIETQAKALEKTENLPELW 960

Db 803 --DEEFVWLTKASGVPGSRPTADSGPVNHGFMSTIASGTEVSTVNPQTQ--SEHLPDFK 859

Qy 961 TTAFTSTHLVRAM-----NORPMVLGISISKYHGAAGNRRVFOAGNWSG--1006

Db 860 LFSVTNGTAVTKSMNPSIAKIEDTTNQNPILIFP--SVAEIRDSA-----QAGRASSQS 912

Qy 1007 ---LNGGKNVCPPLFTFDRTRERFIACPRGGFI-----CPVTG--PSSGN 1045

Db 913 AHPVTGNN---MATYGHNTYSSFTSKASTVLQPINPTESYGPQIPITGVSRPSSD 966

RESULT 15

US-09-905-129-13

Sequence 13, Application US/09905129

Patent No. US20020137705A1

GENERAL INFORMATION:

APPLICANT: Einat, et al

TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE

TITLE OF INVENTION: AND USES THEREOF

FILE REFERENCE: 540579-2007.2

CURRENT APPLICATION NUMBER: US/09/905,129

CURRENT FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: 09/802,318

PRIOR FILING DATE: 2001-03-08

PRIOR APPLICATION NUMBER: 60/207,821

PRIOR FILING DATE: 2000-05-30

PRIOR APPLICATION NUMBER: 60/084,944

PRIOR FILING DATE: 1998-05-11

PRIOR APPLICATION NUMBER: 60/085,673

PRIOR FILING DATE: 1998-05-15

NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patent in version 3.0

SEQ ID NO 13

LENGTH: 2597

TYPE: PRT

ORGANISM: Rattus sp.

FEATURE:

NAME/KEY: misc_feature

LOCATION: (1)..(2597)

OTHER INFORMATION: 'x' can be any amino acid

US-09-905-129-13

Query Match 1.9%; Score 120.5; DB 9; Length 2597;

Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;

Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

Qy 416 AGPHLAANPQTD---RDGHVLSQSQTSSNTE-----FSDVYLALICG 455

Db 274 SGAFCTKPTIDPSLKSKSLVTQEDNGSASTSPQDFTPEFGSLSLNMTXXSGNKADMVCS 333

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QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKYVTGTFDSEIPCSLCEKHTRPV-----CAHT 511
Db 334 IQKP-----SRTSPTAFTEENDYIM--LNASFSTNLVCSVDYDYNHIQVWQALLALYS 382
QY 512 TVHRLRQMP-----RFGQATROPFGVGTGMSQYSDCDPLGNAYAPYLILRKPGD 561
Db 383 DSPILILRKPOLTEPSSLSRYKQVALRPEDIFTSIEADV--ADPFWFQOEKIVLQNLRT 441
QY 562 QTEAAKATMODTYRATLERLFDLEQERL-----LDR-----GAPCSSEG 601
Db 442 ATTLSTLQTFSDAQIALPRAEMRAERLKWMTILMNNPKLERTVLVGGTIALSCPGKG 501
QY 602 -----LSSVIVDHPTR-----RILDTLRARIE-OTTTFQMKVL---VETRD----- 639
Db 502 DSPHLEWLLADGSKVRAPYVSEDGRILIDKNGKLEQWADSFAGLHCHCISTNDADAV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFKVTRHLAVVQDLALSOCHCV 691
Db 562 LTYRITVVEPYGESTHDSGVQHTVVTGETLDLPCLSTG-----VPDASIS---WI 608
QY 692 FYGQOQVEGNFRNQFVLRRFVDFLNGGPISTRSITVTLSSEGPVS--APNPT----- 743
Db 609 LPNGTVFQPSRDR-----QILNNGTLRILOVT-PKQOQHYQCVAAANPSGADPSS 657
QY 744 -----LGQDAPAGRTFDGDLARVSVEVIRDIRVKNRVVFGSGNCTNLSEAAAR 791
Db 658 FKVSQVKQGMVHEHREAGGSGLGS-PNSSVSLKQPASLK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQOEKRVDMHLGALG-FLKQFHGLLFFRGMPNPSKSPNPFQWFTILQ---R 847
Db 712 ----VSGVHRKNKRDLIHRRRGDSTLRFRF--HRRQLPSARRIDPQWAAALLEKAKK 765
QY 848 NOMPADKLTHEITTT-----IAVKRFTTEYAAINFNLPPPTCIGELAQFYMANLILK 900
Db 766 NSVP-----KKQENTTVKPVPLAVPLVELTDEKDSGMI--PP----- 802
QY 901 YCDHSGYVINTLTSITGARRPRDPSSVLHWRKDVTSAAIDTQAKALLEKTENLPELW 960
Db 803 --DEEFVNLTKASGVPGRSPTADSGPVNKGFTWSTIASGTETVSTVNPQTLO-SEHLPDFK 859
QY 961 TTAFTSTHLVRAAM-----NORPMVVLGISISKYHGAAGNNRVFQAGNWSG-- 1006
Db 860 LFSVTNGTAVTKSMNPSIASKIEDTTNQNPILIFF-SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGGKNVCPLFTDRTRFRFIIACPRGGFI-----CPVTG---PSSGN 1045
Db 913 AHPVTGNN---MATVGHNTVTSSTSKASTVLQPINPTESYGPQIPITGVSRPSSSD 966

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RESULT 16
US-09-991-630-2
; Sequence 2, Application US/09991630
; Patent No. US20020151514A1
; GENERAL INFORMATION:
; APPLICANT: Einat, et al
; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
; FILE REFERENCE: 540579-2007.3
; CURRENT APPLICATION NUMBER: US/09/991,630
; CURRENT FILING DATE: 2001-11-06
; PRIOR APPLICATION NUMBER: 09/905,129
; PRIOR FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: 09/802,318
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 09/729,485
; PRIOR FILING DATE: 2000-12-04
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 2597
; TYPE: PRT
; ORGANISM: Rattus species
; FEATURE:

```

```

; NAME/KEY: misc feature
; LOCATION: (1)_(2597)
; OTHER INFORMATION: 'x' can be any amino acid
US-09-991-630-2

Query Match
Best Local Similarity 1.9%; Score 120.5; DB 9; Length.2597;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

QY 416 AGPHLAANPQTD---RDGHVLSQSQTSSNTE-----FSDVDYLALICG 455
Db 274 SGAPLCTKPTIDPSLKSLSLVTQEDNGSASTSPQDIEFPGSLSLANTXXSGKNKADNVCS 333
QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKYVTGTFDSEIPCSLCEKHTRPV-----CAHT 511
Db 334 IQKP-----SRTSPTAFTEENDYIM--LNASFSTNLVCSVDYDYNHIQVWQALLALYS 382
QY 512 TVHRLRQMP-----RFGQATROPFGVGTGMSQYSDCDPLGNAYAPYLILRKPGD 561
Db 383 DSPILILRKPOLTEPSSLSRYKQVALRPEDIFTSIEADV--ADPFWFQOEKIVLQNLRT 441
QY 562 QTEAAKATMODTYRATLERLFDLEQERL-----LDR-----GAPCSSEG 601
Db 442 ATTLSTLQTFSDAQIALPRAEMRAERLKWMTILMNNPKLERTVLVGGTIALSCPGKG 501
QY 602 -----LSSVIVDHPTR-----RILDTLRARIE-OTTTFQMKVL---VETRD----- 639
Db 502 DSPHLEWLLADGSKVRAPYVSEDGRILIDKNGKLEQWADSFAGLHCHCISTNDADAV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFKVTRHLAVVQDLALSOCHCV 691
Db 562 LTYRITVVEPYGESTHDSGVQHTVVTGETLDLPCLSTG-----VPDASIS---WI 608
QY 692 FYGQOQVEGNFRNQFVLRRFVDFLNGGPISTRSITVTLSSEGPVS--APNPT----- 743
Db 609 LPNGTVFQPSRDR-----QILNNGTLRILOVT-PKQOQHYQCVAAANPSGADPSS 657
QY 744 -----LGQDAPAGRTFDGDLARVSVEVIRDIRVKNRVVFGSGNCTNLSEAAAR 791
Db 658 FKVSQVKQGMVHEHREAGGSGLGS-PNSSVSLKQPASLK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQOEKRVDMHLGALG-FLKQFHGLLFFRGMPNPSKSPNPFQWFTILQ---R 847
Db 712 ----VSGVHRKNKRDLIHRRRGDSTLRFRF--HRRQLPSARRIDPQWAAALLEKAKK 765
QY 848 NOMPADKLTHEITTT-----IAVKRFTTEYAAINFNLPPPTCIGELAQFYMANLILK 900
Db 766 NSVP-----KKQENTTVKPVPLAVPLVELTDEKDSGMI--PP----- 802
QY 901 YCDHSGYVINTLTSITGARRPRDPSSVLHWRKDVTSAAIDTQAKALLEKTENLPELW 960
Db 803 --DEEFVNLTKASGVPGRSPTADSGPVNKGFTWSTIASGTETVSTVNPQTLO-SEHLPDFK 859
QY 961 TTAFTSTHLVRAAM-----NORPMVVLGISISKYHGAAGNNRVFQAGNWSG-- 1006
Db 860 LFSVTNGTAVTKSMNPSIASKIEDTTNQNPILIFF-SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGGKNVCPLFTDRTRFRFIIACPRGGFI-----CPVTG---PSSGN 1045
Db 913 AHPVTGNN---MATVGHNTVTSSTSKASTVLQPINPTESYGPQIPITGVSRPSSSD 966

RESULT 17
US-09-991-630-10
; Sequence 10, Application US/09991630
; Patent No. US20020151514A1
; GENERAL INFORMATION:
; APPLICANT: Einat, et al
; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
; FILE REFERENCE: 540579-2007.3
; CURRENT APPLICATION NUMBER: US/09/991,630
; CURRENT FILING DATE: 2001-11-06
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 2597
; TYPE: PRT
; ORGANISM: Rattus species
; FEATURE:

```

;; PRIOR APPLICATION NUMBER: 09/905,129
;; PRIOR FILING DATE: 2001-07-13
;; PRIOR APPLICATION NUMBER: 09/802,318
;; PRIOR FILING DATE: 2001-03-08
;; PRIOR APPLICATION NUMBER: 09/729,485
;; PRIOR FILING DATE: 2000-12-04
;; NUMBER OF SEQ ID NOS: 28
;; SOFTWARE: Patent in version 3.0
;; SEQ ID NO 10
;; LENGTH: 2597
;; TYPE: PRT
;; ORGANISM: Rattus species
;; FEATURE:
;; NAME/KEY: misc.feature
;; LOCATION: (1)..(2597)
;; OTHER INFORMATION: 'x' can be any amino acid

US-09-991-630-10

Query Match 1.9%; Score 120.5; DB 9; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;
QY 416 AGPHLAANPQD---RDGHVLSQSTGSSNTE-----FSDVYLALICG 455
DB 274 SGAFLECKTPIDPSLKSLSVTQEDNGSASTSQDFTIEPFGSLSLNMTXXSGNKADWVCS 333
QY 456 FGAPLLARLLFYLERCDAGFTGHDALKYVTGTFDSEIPCSLCEKHTRPV---CAHT 511
DB 334 IQKP-----SRTSPTAFTENDYIM--LNASFSTNLVCSVDYVNHQVWQLLALYS 382
QY 512 TVHRLRQMP-----RFGQATQPICGVFTGNSQYSDCDPLGNVAPYLILRKPGD 561
DB 383 DSPILIERKPOLTEPSSRYKQVALRPEDIFTSTIEADV--ADPFWQEKIVLQNLRT 441
QY 562 QTEAAKATMDTYRATLERLFDLEQERL-----LDR-----GAPCSSEG 601
DB 442 ATTSLTQIQFSTDAQIALPRAEMRAERLKWMLMNNPKLERTVLVCGTIALSCPGKG 501
QY 602 -----LSSVIVDHTPFR-----RILDTLRARIE-OTTQFMKVL---VETRD----- 639
DB 502 DSPHLEWLLADGSKVAPYVSEDGRILLDKNGKLEQWADSFDAGLYHCISTNDADAV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFLVKRTHLAVQDLALSOCHV 691
DB 562 LTYRITVVEPYGESTHDSGVQHTVVTGETLDLCLSTG-----VPDASIS---WI 608
QY 692 FYGQOQVEGRNFRNFPQVLRFRFVLDLNGGFTSTRISITVTLSEGPVS--APNPT----- 743
DB 609 LPGNVTFSPQSRDR-----QILNNGTLRILOVT--PKDQGHYQCVAAVPSGADFSS 657
QY 744 -----LGQDAPAGRTFDGLARVSVEVIRDIRVKNRVVFGSGNCTNLSEAAAR 791
DB 658 FKVSQKQGVQKQVVEHREAGGSLGE--PNSSVSLKQPSLK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQROEKRVDMHLHGALG--FLKQFHGLLPPRGMPNPSKSPNPQFWTLQ---R 847
DB 712 ---VSGVHRKKNKRDLLHRRRGDSTLRRFRE--HRRQLPLSARRIDPQWMAALLERAKK 765
QY 848 NOMPADKLTHEEITT-----IAAVKFTTEYAAINFINLPPTCIGELAQFYMANLILK 900
DB 766 NSVP-----KQOENTTVKVPVLAFLVELTDEKQASGMI--PP----- 802
QY 901 YCDHSOYLINTLTSITGARRPRDPSSVLHWRKDVTSAADETQAKALLEKTENLPELW 960
DB 803 ---DEEFVWLTKASQVGRSTADSGPVNHHGFMISIASGTEVSTVNPQTLLQ--SEHLPDFK 859
QY 961 TTAFTSTHLVRAAM-----NORPMVVLGISISKYHGAAGNNRVFQAGNWSG-- 1006
DB 860 LFSVTNGTAVTKSMNPSASKIEDTTNQNPFIIPF--SVAETIRDSA-----QAGRASSQS 912
QY 1007 ---LNGGKVCLEPFTFTRFLIACPGGFI-----CPVTG---PSSGN 1045
DB 913 AHPVTGGN-----MATYGHNTNTSISSTKASTVLPQINPTESYGPQIPIGVSRSSSD 966

RESULT 18

US-09-991-630-13
;; Sequence 13, Application US/09991630
;; Patent No. US20020151514A1
;; GENERAL INFORMATION:
;; APPLICANT: Einat, et al
;; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE;
;; FILE REFERENCE: 540579-2007.3
;; CURRENT APPLICATION NUMBER: US/09/991,630
;; CURRENT FILING DATE: 2001-11-06
;; PRIOR APPLICATION NUMBER: 09/905,129
;; PRIOR FILING DATE: 2001-07-13
;; PRIOR APPLICATION NUMBER: 09/802,318
;; PRIOR FILING DATE: 2001-03-08
;; PRIOR APPLICATION NUMBER: 09/729,485
;; PRIOR FILING DATE: 2000-12-04
;; NUMBER OF SEQ ID NOS: 28
;; SOFTWARE: Patent in version 3.0
;; SEQ ID NO 13
;; LENGTH: 2597
;; TYPE: PRT
;; ORGANISM: Rattus species
;; FEATURE:
;; NAME/KEY: misc.feature
;; LOCATION: (1)..(2597)
;; OTHER INFORMATION: 'x' can be any amino acid

US-09-991-630-13

Query Match 1.9%; Score 120.5; DB 9; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;
QY 416 AGPHLAANPQD---RDGHVLSQSTGSSNTE-----FSDVYLALICG 455
DB 274 SGAFLECKTPIDPSLKSLSVTQEDNGSASTSQDFTIEPFGSLSLNMTXXSGNKADWVCS 333
QY 456 FGAPLLARLLFYLERCDAGFTGHDALKYVTGTFDSEIPCSLCEKHTRPV---CAHT 511
DB 334 IQKP-----SRTSPTAFTENDYIM--LNASFSTNLVCSVDYVNHQVWQLLALYS 382
QY 512 TVHRLRQMP-----RFGQATQPICGVFTGNSQYSDCDPLGNVAPYLILRKPGD 561
DB 383 DSPILIERKPOLTEPSSRYKQVALRPEDIFTSTIEADV--ADPFWQEKIVLQNLRT 441
QY 562 QTEAAKATMDTYRATLERLFDLEQERL-----LDR-----GAPCSSEG 601
DB 442 ATTSLTQIQFSTDAQIALPRAEMRAERLKWMLMNNPKLERTVLVCGTIALSCPGKG 501
QY 602 -----LSSVIVDHTPFR-----RILDTLRARIE-OTTQFMKVL---VETRD----- 639
DB 502 DSPHLEWLLADGSKVAPYVSEDGRILLDKNGKLEQWADSFDAGLYHCISTNDADAV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFLVKRTHLAVQDLALSOCHV 691
DB 562 LTYRITVVEPYGESTHDSGVQHTVVTGETLDLCLSTG-----VPDASIS---WI 608
QY 692 FYGQOQVEGRNFRNFPQVLRFRFVLDLNGGFTSTRISITVTLSEGPVS--APNPT----- 743
DB 609 LPGNVTFSPQSRDR-----QILNNGTLRILOVT--PKDQGHYQCVAAVPSGADFSS 657
QY 744 -----LGQDAPAGRTFDGLARVSVEVIRDIRVKNRVVFGSGNCTNLSEAAAR 791
DB 658 FKVSQKQGVQKQVVEHREAGGSLGE--PNSSVSLKQPSLK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQROEKRVDMHLHGALG--FLKQFHGLLPPRGMPNPSKSPNPQFWTLQ---R 847
DB 712 ---VSGVHRKKNKRDLLHRRRGDSTLRRFRE--HRRQLPLSARRIDPQWMAALLERAKK 765
QY 848 NOMPADKLTHEEITT-----IAAVKFTTEYAAINFINLPPTCIGELAQFYMANLILK 900

Db 766 NSVP-----KKQNTTVPVPLAVPLVELTDEKDSAGMI--PP----- 802

Qy 901 YCHSGLYINTLTSITGARRRDPSSVLHWIRKDVTSAAADIETQAKALLEKTENLPELM 960

Db 803 --DEEFVLTAKASGVGRSPADSGPVNHGFMTSIASGTEVSTVNPQTLO--SEHLPDFK 859

Qy 961 TTAFTSTHLVRAAM-----NQSPMVVLGISIKYHGAAGNRRVFOAGNWSG-- 1006

Db 860 LFSVTNGTAVTKSMNPISAKIEDTTNQNPIIIFP--SVAEIRDSA-----QAGRASSQS 912

Qy 1007 ---LNGGKNVCPLFTDRRRIIACPRGGFI-----CPVTG---PSSGN 1045

Db 913 AHPVTGN-----MATYGHNTYSSFTSKASTVLQPINPTESYGQIPIITGVSRPSSD 966

RESULT 19

US-10-454-351-2

Sequence 2, Application US/10454351

Publication No. US20040053301A1

GENERAL INFORMATION:

APPLICANT: Quark Biotech Inc.; Paz Einat, et al

TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE

TITLE OF INVENTION: AND USES THEREOF

FILE REFERENCE: 010/PCT2-US2; EINAT=7E

CURRENT APPLICATION NUMBER: US/10/454,351

CURRENT FILING DATE: 2003-06-04

PRIOR APPLICATION NUMBER: US 09/991,630

PRIOR FILING DATE: 2001-11-06

PRIOR APPLICATION NUMBER: US 09/905,129

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 09/802,318

PRIOR FILING DATE: 2001-03-08

PRIOR APPLICATION NUMBER: US 09/729,485

PRIOR FILING DATE: 2000-12-04

PRIOR APPLICATION NUMBER: US 09/312,216

PRIOR FILING DATE: 1999-05-14

NUMBER OF SEQ ID NOS: 37

SOFTWARE: Patent in version 3.0

SEQ ID NO 2

LENGTH: 2597

TYPE: PRT

ORGANISM: Rattus species

FEATURE:

NAME/KEY: misc feature

LOCATION: (1)-(2597)

OTHER INFORMATION: 'x' can be any amino acid

US-10-454-351-2

Query Match 1.9%; Score 120.5; DB 12; Length 2597;

Best Local Similarity 18.6%; Pred. No. 0.67;

Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

Qy 416 AGPLAANPQTD---RDGHVLSQSOSTGSSNTE-----FSDVYLALICG 455

Db 274 SGAFCLCTKTIDPSLKSLSVTQEDNGSASTSPQDFIEFGSLSLNMTXXSGNKADMVCS 333

Qy 456 FGAPLLARLLYLERCDAGFTGHHGALKVVTGTFDSEIPSCICEKHTRPV-----CAHT 511

Db 334 IQKP-----SRTSTFATEENDYIM--LNASFSTNLVCSVDYNNHIQPVWQLALYS 382

Qy 512 TVHRLRQMP-----RFGATROPICVFTMNSQYSDCDPLGNVAPYLLIRKPGD 561

Db 383 DSPILIERKPOLTETPSLSRYKQVALRPFIDFTSIEADVR-ADPFWFQOEKIVLQNR 441

Qy 562 QTEAAKATMOTYTRATLERLFDLEQERL-----LDR-----GAPCSSEG 601

Db 442 ATTLLSTLQISTDAQIALPRAEMRAELKWTMLMNNPKLRTVLVGGTIALSCPKG 501

Qy 602 -----LSSVIVDHPHTR-----RIIDLTLARIE-OTTQFMKVL---VETRD----- 639

Db 502 DPSPLEMLLADGSKVRAPYVSEDRILIDKNGKLEQADSFAGLYHCISTNDADADY 561

Qy 640 --YKIR--EGLSEATHSWALTFDPVSGAF----CPITFLVKRTHLAVVQDLALSQCHV 691

Db 562 LTRITVVEPYGESTHDSGVQHVTVTGETLIDLPLCLSTG-----VPDASIS--WI 608

Qy 692 FYCQVEGRNFRNQFQVLRREFDVLFNGFISTRITVTLSEGPVS--APNT----- 743

Db 609 LPGNTVFSQPSRDR-----QILNNGTLRILOVT-PKQDQHYQCVAANPSGADFSS 657

Qy 744 -----LGQDAPAGRTFDGLARVSVEIRDIRVKNRVWFSNGCTNLSEARAR 791

Db 658 FKVSQVKQGMVHEHREAGSGLGE--PNSSVLKKQASLK-----LSASALTGSEAGKQ- 711

Qy 792 LVGLASAYQREQKRVMDMLHGALG--FLKQFPHGLLFRGMPNPNKSPNPQWFTLLQ--R 847

Db 712 ----VSGVHRKXKRDLIHRRRGDSTLRRFFE--HRRQLPLSARRIDPQRAWALLERAKK 765

Qy 848 NQMPADKLTHEBIT-----TAAVKRFTTEVAAINFNLPTCTICELAGAFYMANLILK 900

Db 766 NSVP-----KKQNTTVPVPLAVPLVELTDEKDSAGMI--PP----- 802

Qy 901 YCHSGLYINTLTSITGARRRDPSSVLHWIRKDVTSAAADIETQAKALLEKTENLPELM 960

Db 803 --DEEFVLTAKASGVGRSPADSGPVNHGFMTSIASGTEVSTVNPQTLO--SEHLPDFK 859

Qy 961 TTAFTSTHLVRAAM-----NQSPMVVLGISIKYHGAAGNRRVFOAGNWSG-- 1006

Db 860 LFSVTNGTAVTKSMNPISAKIEDTTNQNPIIIFP--SVAEIRDSA-----QAGRASSQS 912

Qy 1007 ---LNGGKNVCPLFTDRRRIIACPRGGFI-----CPVTG---PSSGN 1045

Db 913 AHPVTGN-----MATYGHNTYSSFTSKASTVLQPINPTESYGQIPIITGVSRPSSD 966

RESULT 20

US-10-454-351-10

Sequence 10, Application US/10454351

Publication No. US20040053301A1

GENERAL INFORMATION:

APPLICANT: Quark Biotech Inc.; Paz Einat, et al

TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE

TITLE OF INVENTION: AND USES THEREOF

FILE REFERENCE: 010/PCT2-US2; EINAT=7E

CURRENT APPLICATION NUMBER: US/10/454,351

CURRENT FILING DATE: 2003-06-04

PRIOR APPLICATION NUMBER: US 09/991,630

PRIOR FILING DATE: 2001-11-06

PRIOR APPLICATION NUMBER: US 09/905,129

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 09/802,318

PRIOR FILING DATE: 2001-03-08

PRIOR APPLICATION NUMBER: US 09/729,485

PRIOR FILING DATE: 2000-12-04

PRIOR APPLICATION NUMBER: US 09/312,216

PRIOR FILING DATE: 1999-05-14

NUMBER OF SEQ ID NOS: 37

SOFTWARE: Patent in version 3.0

SEQ ID NO 10

LENGTH: 2597

TYPE: PRT

ORGANISM: Rattus species

FEATURE:

NAME/KEY: misc feature

LOCATION: (1)-(2597)

OTHER INFORMATION: 'x' can be any amino acid

US-10-454-351-10

Query Match 1.9%; Score 120.5; DB 12; Length 2597;

Best Local Similarity 18.6%; Pred. No. 0.67;

Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

Qy 416 AGPLAANPQTD---RDGHVLSQSOSTGSSNTE-----FSDVYLALICG 455

Db 274 SGAFCLCTKTIDPSLKSLSVTQEDNGSASTSPQDFIEFGSLSLNMTXXSGNKADMVCS 333

QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKVYVCTGTFDSEIPCSICEKHTRPV-----CAHT 511
Db 334 IQKP-----SRTSPTAFTEENDYIM--LNASFSTNLVCSVDYVNHQIPVWQOLLALYS 382
QY 512 TVHRLRORMP-----RFGQATROPICGVFGTMMNSQYSDCDPLGNVAPYILIRKPGD 561
Db 383 DSPILIRKQQLTETPSLSRYKQVALRPEDIFTSIEADV--ADPFWFQEQEKIVQLNRT 441
QY 562 QTEAAKATQMDTYRATLERLFDLEQERL-----LOR-----GAPCSSEG 601
Db 442 ATTSLTLOIQFSTDAQIALPRAEMRAERLKWMTILMNNPKLERITVLVGGTIALSCPGKG 501
QY 602 -----LSSVIVDHTFR-----RILDTLRAIE-OTTTOFMKVL-----VETRD----- 639
Db 502 DPSHLEWLLADGSKVRAPYVSEGRILIDKNGKLEQADSFAGLYHCISTNDADAV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF-----CPITNFLVKRTHLAVVQDLALSCQCHV 691
Db 562 LTYRITVVEPYGESTHDSGVQHTVVTGETLDPCLSTG-----VPDASIS--WI 608
QY 692 FYGQOQVEGRNFRNOFQVLRERRFDVLFNGGFISTRSITVTLSEGPVS--APNPT----- 743
Db 609 LPGNTVFSQPSRDR-----QILNNGTLRILOVT--PKDQGHYQCVAAANPSGADFS 657
QY 744 -----LGQAPAGRTFDGLARVSVEVIRDIRVKNRVVFGNCTNLSEAAAR 791
Db 658 FKVSQVKQGVHREHREAGSGLGE--PNSVSLKQPSALK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQROEKVDMHLHGALG--FLKQPHGLLFPFGMPNPSKSPNPQWFTLLQ---R 847
Db 712 ---VSGVHRKXKRDLIHRRRGDSTLRFRF--HRRQLPLSARRIDPQWAAALLEKAKK 765
QY 848 NQPADKLTHERIIT-----IAAVKFTTEEYAAINFNLPTTCIGELAQFYMANLILK 900
Db 766 NSVP-----KKQENTTVKPVPLAVPLVELTDEKASGMI--PP----- 802
QY 901 YCDHSQYLINTLTSIITGARRPRDPSSVLHWIRKDVTSAAIDETQAKALLEKTENLPELW 960
Db 803 --DEEFWVLTKASGVPRSPADSGPVNHGFWTSIASGTEVSTVNPQTLO--SEHLPDFK 859
QY 961 TTATSTHLVRAAM-----NORPMVVLGISISKYHGAAGNRRVFOAGNWSG-- 1006
Db 860 LFSVTNGTAVTKSMNPSIASKIEDTNNQNPFIIP--SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGGKNVCPLTFDTRRFRFIACPRGFI-----CPVTG---PSSGN 1045
Db 913 AHPVTGNN-----MATYGHNTYSSFTSKASTVLOPINPTESYGQIPITGVSRPSSSD 966

RESULT 21
US-10-454-351-13
; Sequence 13, Application US/10454351
; Publication No. US20040053301A1
; GENERAL INFORMATION:
; APPLICANT: Quark Biotech Inc.; Paz Binat, et al
; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
; FILE OF INVENTION: AND USES THEREOF
; FILE REFERENCE: 010/PCT-US2; EINAT=7E
; CURRENT APPLICATION NUMBER: US/10/454,351
; CURRENT FILING DATE: 2003-06-04
; PRIOR APPLICATION NUMBER: US 09/991,630
; PRIOR FILING DATE: 2001-11-06
; PRIOR APPLICATION NUMBER: US 09/905,129
; PRIOR FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: US 09/802,318
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: US 09/729,485
; PRIOR FILING DATE: 2000-12-04
; PRIOR APPLICATION NUMBER: US 09/312,216
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 13

; LENGTH: 2597
; TYPE: PRT
; ORGANISM: Rattus species
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2597)
; OTHER INFORMATION: 'x' can be any amino acid
US-10-454-351-13

Query Match 1.9%; Score 120.5; DB 12; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

QY 416 AGPHLAANPQTD---RDGHVLSQSQTGSNTE-----FSDVYLALICG 455
Db 274 SGAFLCTKXTIDPSLKSXLVTQEDNGSASTSQDFIEFFGSLSLNMTXSGNKADWVCS 333
QY 456 FGAPLLARLLFYLERCDAGFTGGHGDALKVYVCTGTFDSEIPCSICEKHTRPV-----CAHT 511
Db 334 IQKP-----SRTSPTAFTEENDYIM--LNASFSTNLVCSVDYVNHQIPVWQOLLALYS 382
QY 512 TVHRLRORMP-----RFGQATROPICGVFGTMMNSQYSDCDPLGNVAPYILIRKPGD 561
Db 383 DSPILIRKQQLTETPSLSRYKQVALRPEDIFTSIEADV--ADPFWFQEQEKIVQLNRT 441
QY 562 QTEAAKATQMDTYRATLERLFDLEQERL-----LDR-----GAPCSSEG 601
Db 442 ATTSLTLOIQFSTDAQIALPRAEMRAERLKWMTILMNNPKLERITVLVGGTIALSCPGKG 501
QY 602 -----LSSVIVDHTFR-----RILDTLRAIE-OTTTOFMKVL-----VETRD----- 639
Db 502 DPSHLEWLLADGSKVRAPYVSEGRILIDKNGKLEQADSFAGLYHCISTNDADAV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF-----CPITNFLVKRTHLAVVQDLALSCQCHV 691
Db 562 LTYRITVVEPYGESTHDSGVQHTVVTGETLDPCLSTG-----VPDASIS--WI 608
QY 692 FYGQOQVEGRNFRNOFQVLRERRFDVLFNGGFISTRSITVTLSEGPVS--APNPT----- 743
Db 609 LPGNTVFSQPSRDR-----QILNNGTLRILOVT--PKDQGHYQCVAAANPSGADFS 657
QY 744 -----LGQAPAGRTFDGLARVSVEVIRDIRVKNRVVFGNCTNLSEAAAR 791
Db 658 FKVSQVKQGVHREHREAGSGLGE--PNSVSLKQPSALK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQROEKVDMHLHGALG--FLKQPHGLLFPFGMPNPSKSPNPQWFTLLQ---R 847
Db 712 ---VSGVHRKXKRDLIHRRRGDSTLRFRF--HRRQLPLSARRIDPQWAAALLEKAKK 765
QY 848 NQPADKLTHERIIT-----IAAVKFTTEEYAAINFNLPTTCIGELAQFYMANLILK 900
Db 766 NSVP-----KKQENTTVKPVPLAVPLVELTDEKASGMI--PP----- 802
QY 901 YCDHSQYLINTLTSIITGARRPRDPSSVLHWIRKDVTSAAIDETQAKALLEKTENLPELW 960
Db 803 --DEEFWVLTKASGVPRSPADSGPVNHGFWTSIASGTEVSTVNPQTLO--SEHLPDFK 859
QY 961 TTATSTHLVRAAM-----NORPMVVLGISISKYHGAAGNRRVFOAGNWSG-- 1006
Db 860 LFSVTNGTAVTKSMNPSIASKIEDTNNQNPFIIP--SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGGKNVCPLTFDTRRFRFIACPRGFI-----CPVTG---PSSGN 1045
Db 913 AHPVTGNN-----MATYGHNTYSSFTSKASTVLOPINPTESYGQIPITGVSRPSSSD 966

RESULT 22
US-09-729-485A-2
; Sequence 2, Application US/09729485A
; Publication No. US20020022036A1
; GENERAL INFORMATION:
; APPLICANT: Quark Biotech, Inc.
; APPLICANT: Einat, Paz

APPLICANT: Segev, Orbit
APPLICANT: Skaliter, Rami
APPLICANT: Feinstein, Elena
APPLICANT: Faerman, Alexander
TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
FILE REFERENCE: 540579-2007
CURRENT APPLICATION NUMBER: US/09/729,485A
CURRENT FILING DATE: 2000-12-04
PRIOR FILING DATE: 2000-12-04
PRIOR APPLICATION NUMBER: 09/729,485
PRIOR FILING DATE: 2000-08-04
PRIOR FILING DATE: 2000-05-30
PRIOR FILING DATE: 2000-05-11
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/084,944
PRIOR APPLICATION NUMBER: 60/085,673
NUMBER OF SEQ ID NOS: 22
SOFTWARE: Patent in version 3.1
SEQ ID NO 2
LENGTH: 2597
TYPE: PRT
ORGANISM: Rattus species
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(2597)
OTHER INFORMATION: "Xaa" can be any amino acid
US-09-729-485A-2

Query Match 1.9%; Score 120.5; DB 12; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;
Matches 145; Conservative 113; Mismatches 287

QY 416 AGPLAANPQTD---RDGHVLSSTGSSNTE-----PSVDYLALICG 455
DB 274 SGAFCTKPTIDPSLKSKSLVTQEDNGSASTSPQDFIEPFGSLSLNMTXXSGNKADMVCS 333
QY 456 FGAPLLARLLFYLERCDAGFTGCHGDAKLYVTGTFDSEIPCSLCEKHTRPV-----CAHT 511
DB 334 IQKP-----SRTSPTAFTENDYIM--LNASFSTNLVCSVDYHNIQPVWQLLALYS 382
QY 512 TVHRLRQMP-----RFGQATROPIGVFGTMNSQYSCDPLGNVAPYLILKPGD 561
DB 383 DSPILIERKPOLTTPLSSRYKQVALRPEDIFTSIEADV-ADFPWFQEKIVLQNLRT 441
QY 562 QTEAAKATMQDYTRATLERLFIDLEQERL-----LDR-----GAPCSSEG 601
DB 442 ATTSLTQIQFSTDAQIALPRAEMRAERLKWMTMLMNNPKLRTVLVGGTIALSCPGKG 501
QY 602 ---LSSVIVDHPTFR-----RIIDTLRAIE-QTTQFMKVL---VETRD----- 639
DB 502 DSPHLEWLLADGSKVRAPVYVSEDEGRILIDKNKLEQADSFAGLYHCISTNDADV 561
QY 640 --YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFLVKRTHLAVQDPLALSOCHV 691
DB 562 LTYRITVVEPGESTHDSGVHTVVTGTDLPLCLSTG-----VPDASIS--WI 608
QY 692 FYGQVEGRNFRNQPVLRFRVDLFNGGPISTRITVLSSEPVS--APNPT----- 743
DB 609 LPGNVTFSPSKDR-----QILNNGTLRILOVT-PRDQGHYQCVAAANPSGADPSS 657
QY 744 -----LGDAPAGRTFGDGLARVSVEVIRDIRVKNRVVFGSGNCTNLSEAAAR 791
DB 658 FKVSQKKGQRMVEHREAGSGGIGE-PNSSVSLKQPASLK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAYQRPQKRYDMLHGALG-FLKQFHLGLFPPGMPPNKKSPNQFWTLLQ---R 847
DB 712 ----VSGVHRKNKRDLIHRRRGDSTLARFRE--HRROLPLSARRIDPQRWAALLERAKK 765
QY 848 NOMPADKLTHEIIT-----IAAVKFTTEYAAINFINLPICIGELAQFYWANLILK 900

766 NSVP-----KKOENTTVKPVFLAVFLVELTDEEKDASGMI--PP----- 802
QY 901 YCDHSQYLINTLSITGAARRPRDPSSVHLWIRKDVTSAAADIETOAKALLEKTNLPELW 960
DB 803 --DEEFMWLTKKASGVPGSPSTADSGPVNHGFMTSIASGTETVSTVNPQTLQ--SEHLPDFK 859
QY 961 TTAFTSTHLVRAAM-----NOREPMVLGISISKYHGAAGNRRVQAGNWSG-- 1006
DB 860 LFSVTNGTAVTKSMNPSIASKIEDTTNQNPILIPP-SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGGKNVCPLEFTFDRTRRFIIACPRGGFI-----CPVTG---PSSGN 1045
DB 913 AHPVTGGN-----MATYGHNTYSSPTSKASTVLPINPTESYGPQIPITGVSRFSSSD 966

RESULT 23
US-09-729-485A-10
Sequence 10, Application US/09729485A
Publication No. US20020022026A1
GENERAL INFORMATION:
APPLICANT: Quark Biotech, Inc.
APPLICANT: Einat, Paz
APPLICANT: Segev, Orbit
APPLICANT: Skaliter, Rami
APPLICANT: Feinstein, Elena
APPLICANT: Faerman, Alexander
TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
FILE REFERENCE: 540579-2007
CURRENT APPLICATION NUMBER: US/09/729,485A
CURRENT FILING DATE: 2000-12-04
PRIOR APPLICATION NUMBER: 09/729,485
PRIOR FILING DATE: 2000-12-04
PRIOR FILING DATE: 2000-08-04
PRIOR FILING DATE: 2000-05-30
PRIOR FILING DATE: 1998-05-11
PRIOR FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 22
SOFTWARE: Patent in version 3.1
SEQ ID NO 10
LENGTH: 2597
TYPE: PRT
ORGANISM: Rattus species
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(2597)
OTHER INFORMATION: "Xaa" can be any amino acid
US-09-729-485A-10

Query Match 1.9%; Score 120.5; DB 12; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;
Matches 145; Conservative 113; Mismatches 287

QY 416 AGPLAANPQTD---RDGHVLSSTGSSNTE-----PSVDYLALICG 455
DB 274 SGAFCTKPTIDPSLKSKSLVTQEDNGSASTSPQDFIEPFGSLSLNMTXXSGNKADMVCS 333
QY 456 FGAPLLARLLFYLERCDAGFTGCHGDAKLYVTGTFDSEIPCSLCEKHTRPV-----CAHT 511
DB 334 IQKP-----SRTSPTAFTENDYIM--LNASFSTNLVCSVDYHNIQPVWQLLALYS 382
QY 512 TVHRLRQMP-----RFGQATROPIGVFGTMNSQYSCDPLGNVAPYLILKPGD 561
DB 383 DSPILIERKPOLTTPLSSRYKQVALRPEDIFTSIEADV-ADFPWFQEKIVLQNLRT 441
QY 562 QTEAAKATMQDYTRATLERLFIDLEQERL-----LDR-----GAPCSSEG 601
DB 442 ATTSLTQIQFSTDAQIALPRAEMRAERLKWMTMLMNNPKLRTVLVGGTIALSCPGKG 501

QY 602 -----LSVIVDHTFR-----RILDTLRARIE-OTTQFMKVL-----VETRD----- 639
 Db 502 DPSPHLEWLLADGSKVRAPYVSEDRILIDKNGKLEQLQADSPDAGLYHICISTNDADADV 561
 QY 640 --YKIR--EGLSEATHSMALTFDYSQAF-----CPITNFWLKRTHLAVVODLALSQCHCV 691
 Db 562 LTYRITVVEPYGESHDSGVQHTVVTGETLDPCLSTG-----VPDASIS-----WI 608
 QY 692 FYGQOQVEGRNFRNQFQVLRFRFVDFLNGGFISTRSITVTLSEGPVS--APNPT----- 743
 Db 609 LFGNTVFSQPSRDR-----QILNNGTLRLQVTP-KDQGHYQCVAAANPSGADPSS 657
 QY 744 -----LGDAPAGRTFQDGLARVSVEVIRDIRVKNRVVFGSGNCTNLSEARAR 791
 Db 658 FKVSQVKQGMVHREAGSGGLGE--PNSVSLKQPASLK-----LSASALTGSEAKQ- 711
 QY 792 LVGLASAYORQEKRVDMHLGALG--FLKQFHGLLPPRGMPNPSKSPNPQFWTILQ-----R 847
 Db 712 ----VSGVHRKNKRDLLHRRRGDSTLRPRE--HRRQLPSARRIDPQWAALEKAKK 765
 QY 848 NOMPADKLTHEIIT-----IAVKRFTTEYAAINFINLPPTCIGELAQFYMANLILK 900
 Db 766 NSVP-----KKQENTTVKPVPLAVPLVELTDEKDSGMI--PP----- 802
 QY 901 YCDHSQYLINTLTSIITGARRPRDPSVVLHWRKDVTSAAADIETQAKALLEKTENLPELW 960
 Db 803 --DEEFWLKTKASGVPGRSPTADSGPVNHGFMTSASGTEVSTVNPOTLQ--SEHLPDFK 859
 QY 961 TTAFTSTHLVRAAM-----NORPMVVLGISIKYHGAAGNNRVFQAGNWSG-- 1006
 Db 860 LFSVTNGTAVTKSMNPSIASKIEDTTNQNPFIIPP-SVAEIRDSA-----QAGRASSQS 912
 QY 1007 ---LNGGNVCPLFTFDRTRRFRFIACPRGGFI-----CPVTG---PSSGN 1045
 Db 913 AHPVTGGN-----MATYGHNTVTSFTSKASTVLQINPTESYGPQIPITGVSRPSSSD 966

RESULT 24
 US-09-729-485A-13
 ; Sequence 13, Application US/09729485A
 ; Publication No. US2002002026A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Quark Biotech, Inc.
 ; APPLICANT: Binat, Paz
 ; APPLICANT: Segev, Orbit
 ; APPLICANT: Skalter, Rami
 ; APPLICANT: Feinstein, Elena
 ; APPLICANT: Faerman, Alexander
 ; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
 ; FILE OF INVENTION: AND USES THEREOF
 ; FILE REFERENCE: 540579-2007
 ; CURRENT APPLICATION NUMBER: US/09/729,485A
 ; CURRENT FILING DATE: 2000-12-04
 ; PRIOR APPLICATION NUMBER: 09/729,485
 ; PRIOR FILING DATE: 2000-12-04
 ; PRIOR APPLICATION NUMBER: 09/632,862
 ; PRIOR FILING DATE: 2000-08-04
 ; PRIOR APPLICATION NUMBER: 60/207,821
 ; PRIOR FILING DATE: 2000-05-30
 ; PRIOR APPLICATION NUMBER: 60/084,944
 ; PRIOR FILING DATE: 1998-05-11
 ; PRIOR APPLICATION NUMBER: 60/085,673
 ; PRIOR FILING DATE: 1998-05-15
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: Patent in version 3.1
 ; SEQ ID NO 13
 ; LENGTH: 2597
 ; TYPE: PRT
 ; ORGANISM: Rattus species
 ; FEATURE:
 ; NAME/KEY: MISC FEATURE
 ; LOCATION: (1)-(2597)
 ; OTHER INFORMATION: "Xaa" can be any amino acid

US-09-729-485A-13
 Query Match 1.9%; Score 120.5; DB 12; Length 2597;
 Best Local Similarity 18.6%; Pred. No. 0.67;
 Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;
 QY 416 AGPHLAANQPTD---RDGHVLSQSQTSGSSNTE-----FSDVYLALIGC 455
 Db 274 SGAFCTKCTIDPSLKSLSVTQEDNGSASTSPQDFIEFGSLSLNMTXXSGNKADWVCS 333
 QY 456 FGAPILARLLFYLERCDAGFTGGHDALKYVTGTDFDSEIPGSLCEKHTRPV-----CAHT 511
 Db 334 IQXP-----SRISPTAFTEENDYIN--LNASFTNLVCSVDYVNHQIPVWQLLALYS 382
 QY 512 TVRLRLQRMP-----RFGQATROPQIGVFTGWNISQYSCDPLCNTAPVYLILKPGD 561
 Db 383 DSEPLILERKPOLTETPSLSRYKQVALREDIFTSEADVR-ADPFWFOEKIVLOLNT 441
 QY 562 QTEAAKATQDVTYRATLERLFDLEOERL-----LDR-----GAPCSSSEG 601
 Db 442 ATTLSTLQIQFSDAQIALPRAEMRAERLKWIMLMMNPKLERTVLVGGTIALSCPGKG 501
 QY 602 -----LSSVIVDHTFR-----RILDTLRARIE-OTTQFMKVL-----VETRD----- 639
 Db 502 DPSPHLEWLLADGSKVRAPYVSEDRILIDKNGKLEQLQADSPDAGLYHICISTNDADADV 561
 QY 640 --YKIR--EGLSEATHSMALTFDYSQAF-----CPITNFWLKRTHLAVVODLALSQCHCV 691
 Db 562 LTYRITVVEPYGESHDSGVQHTVVTGETLDPCLSTG-----VPDASIS-----WI 608
 QY 692 FYGQOQVEGRNFRNQFQVLRFRFVDFLNGGFISTRSITVTLSEGPVS--APNPT----- 743
 Db 609 LFGNTVFSQPSRDR-----QILNNGTLRLQVTP-KDQGHYQCVAAANPSGADPSS 657
 QY 744 -----LGDAPAGRTFQDGLARVSVEVIRDIRVKNRVVFGSGNCTNLSEARAR 791
 Db 658 FKVSQVKQGMVHREAGSGGLGE--PNSVSLKQPASLK-----LSASALTGSEAKQ- 711
 QY 792 LVGLASAYORQEKRVDMHLGALG--FLKQFHGLLPPRGMPNPSKSPNPQFWTILQ-----R 847
 Db 712 ----VSGVHRKNKRDLLHRRRGDSTLRPRE--HRRQLPSARRIDPQWAALEKAKK 765
 QY 848 NOMPADKLTHEIIT-----IAVKRFTTEYAAINFINLPPTCIGELAQFYMANLILK 900
 Db 766 NSVP-----KKQENTTVKPVPLAVPLVELTDEKDSGMI--PP----- 802
 QY 901 YCDHSQYLINTLTSIITGARRPRDPSVVLHWRKDVTSAAADIETQAKALLEKTENLPELW 960
 Db 803 --DEEFWLKTKASGVPGRSPTADSGPVNHGFMTSASGTEVSTVNPOTLQ--SEHLPDFK 859
 QY 961 TTAFTSTHLVRAAM-----NORPMVVLGISIKYHGAAGNNRVFQAGNWSG-- 1006
 Db 860 LFSVTNGTAVTKSMNPSIASKIEDTTNQNPFIIPP-SVAEIRDSA-----QAGRASSQS 912
 QY 1007 ---LNGGNVCPLFTFDRTRRFRFIACPRGGFI-----CPVTG---PSSGN 1045
 Db 913 AHPVTGGN-----MATYGHNTVTSFTSKASTVLQINPTESYGPQIPITGVSRPSSSD 966

RESULT 25
 US-09-802-318-2
 ; Sequence 2, Application US/09802318
 ; Publication No. US20020086825A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Binat, et al
 ; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
 ; FILE OF INVENTION: AND USES THEREOF
 ; FILE REFERENCE: 540579-2007.1
 ; CURRENT APPLICATION NUMBER: US/09/802,318
 ; CURRENT FILING DATE: 2001-03-08
 ; PRIOR APPLICATION NUMBER: 09/632,862
 ; PRIOR FILING DATE: 2000-08-04
 ; PRIOR APPLICATION NUMBER: 60/207,821

;; PRIOR FILING DATE: 2000-05-30
;; NUMBER OF SEQ ID NOS: 25
;; SOFTWARE: Patent in version 3.0
;; SEQ ID NO 2
;; TYPE: PRT
;; LENGTH: 2597
;; ORGANISM: rattus species
;; FEATURE:
;; NAME/KEY: misc feature
;; LOCATION: (1)..(2597)
;; OTHER INFORMATION: 'x' can be any amino acid
US-09-802-318-2

Query Match 1.9%; Score 120.5; DB 12; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

QY	416	AGHPLAANPQTD---RDGHVLSQSSTGSSNTE-----FSDVYLALICG	455
Db	274	SGAFLCKPTIDPSLKSLSVTOEDNGSASTSPQDFIEPFGSLSLNMTXXSGNKADMVCS	333
QY	456	FGAPILARLLFYLERCDAGATGGHDALKYVTGTFDSEIPCSLCEKHTRPV---CAHT	511
Db	334	IQKP-----SRISPTAFTENDYIM--LNASFSTNLVCSVDYHIOQVWOLLALYS	382
QY	512	TVHRLRQMP-----RFGQATROPIGVFGTWMNSQYSCDPLGNYPYLIRKPGD	561
Db	383	DSPLILERKPOLTEPSSLRSRYKQVALRPEDIFTSIEADVRADEPFWQOEKIVLQNLRT	441
QY	562	QTEAAKATMQDYATLERLFDLEQERL-----LDR-----GAPCSSEG	601
Db	442	ATTLSLTIQIFSDAQIALPRAEMRERLKWMTILMNNPKLERTVLVGGTTALSCPCKG	501
QY	602	-----LSSVIVDHTFR-----RILDTLRARIE-OTTTFQFMKVL-----VETRD	639
Db	502	DPSHLEWLLADGSKVRAPVVSDEGRILIDKNGKLELMADSFAGLYHCISTNDADADV	561
QY	640	--YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFLVKRTHLAVVQDLALSCQCHV	691
Db	562	LTyrITVVEPYGESTHDSGVQHTVTGTLDLCLSTG-----VPDASIS---WI	608
QY	692	FYGOQVEGRNFRNQFQVLRRRFVDLFNGGFISTRSITVTLSEGPVS--APNPT	743
Db	609	LPGNTVFSQPSRDR-----QILNNGTLRILOVT-PKQGHVQCVAAFPSGADPSS	657
QY	744	-----LGQDAPAGRTFDGLARVSVSEVIRDIRKNRVVFSNGCTNLSEARAR	791
Db	658	FKVSVQKQGMVREHDEAGGSLGE--PNSSVSLKQPASLK-----LSASALTGSEAGKQ	711
QY	792	LVGLASAYQOEKRVDMHLCALG--FLKQPHGLLFRGMPNPSKSPNQFWTLTQ---R	847
Db	712	-----VSGVHRKXKHRDLIHRRGDSTLRRFRE--HRRQLPLSARRIDPQWAALEKAKK	765
QY	848	NOMPADKLTHEEITT-----IAAVKRFTEEYAAINFILPPTCIGELAQFYMANLILK	900
Db	766	NSVP-----KKQENTVVKPVLAVPLVELTDEKDSGMI--PP-----	802
QY	901	YCHSQVILNTLSITTCARRPRDPSSVLHWIRKDVTSADIEQAKALLEKTEINLPWLW	960
Db	803	--DEEFMVLTKASGVPGRSPTADSGFVNHGFMTSIASGTEVSTVNPOTLQ--SEHLPDFK	859
QY	961	TTAFTSTHLVRAAM-----NORMVVLGISISIKYHGAAGNNRVFOAGNWSG--	1006
Db	860	LFSVTNGTATKSNPSIASKIEDTTNQNDIIFP--SVAIRDSA-----QAGRASSOS	912
QY	1007	---LNGGKNVCPFTFDRTRRRIACRGGFI-----CPVTG---PSSGN	1045
Db	913	AHPVTGNN---NATYGHNTNTYSSTSKASTVLQINPTESYGFQIPITGVSPSSSD	966

RESULT 26

US-09-802-318-10

; Sequence 10, Application US/09802318

;; Publication No. US200200086825A1
;; GENERAL INFORMATION:
;; APPLICANT: Einat, et al
;; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
;; TITLE OF INVENTION: AND USES THEREOF
;; FILE REFERENCE: 540579-2007.1
;; CURRENT APPLICATION NUMBER: US/09/802,318
;; CURRENT FILING DATE: 2001-03-08
;; PRIOR APPLICATION NUMBER: 09/632,862
;; PRIOR FILING DATE: 2000-08-04
;; PRIOR APPLICATION NUMBER: 60/207,821
;; PRIOR FILING DATE: 2000-05-30
;; NUMBER OF SEQ ID NOS: 25
;; SOFTWARE: Patent in version 3.0
;; SEQ ID NO 10
;; LENGTH: 2597
;; TYPE: PRT
;; ORGANISM: Rattus sp.
;; FEATURE:
;; NAME/KEY: misc feature
;; LOCATION: (1)..(2597)
;; OTHER INFORMATION: 'x' can be any amino acid
US-09-802-318-10

Query Match 1.9%; Score 120.5; DB 12; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67; Indels 233; Gaps 40;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;

QY	416	AGHPLAANPQTD---RDGHVLSQSSTGSSNTE-----FSDVYLALICG	455
Db	274	SGAFLCKPTIDPSLKSLSVTOEDNGSASTSPQDFIEPFGSLSLNMTXXSGNKADMVCS	333
QY	456	FGAPILARLLFYLERCDAGATGGHDALKYVTGTFDSEIPCSLCEKHTRPV---CAHT	511
Db	334	IQKP-----SRISPTAFTENDYIM--LNASFSTNLVCSVDYHIOQVWOLLALYS	382
QY	512	TVHRLRQMP-----RFGQATROPIGVFGTWMNSQYSCDPLGNYPYLIRKPGD	561
Db	383	DSPLILERKPOLTEPSSLRSRYKQVALRPEDIFTSIEADVRADEPFWQOEKIVLQNLRT	441
QY	562	QTEAAKATMQDYATLERLFDLEQERL-----LDR-----GAPCSSEG	601
Db	442	ATTLSLTIQIFSDAQIALPRAEMRERLKWMTILMNNPKLERTVLVGGTTALSCPCKG	501
QY	602	-----LSSVIVDHTFR-----RILDTLRARIE-OTTTFQFMKVL-----VETRD	639
Db	502	DPSHLEWLLADGSKVRAPVVSDEGRILIDKNGKLELMADSFAGLYHCISTNDADADV	561
QY	640	--YKIR--EGLSEATHSMALTFDPYSGAF---CPITNFLVKRTHLAVVQDLALSCQCHV	691
Db	562	LTyrITVVEPYGESTHDSGVQHTVTGTLDLCLSTG-----VPDASIS---WI	608
QY	692	FYGOQVEGRNFRNQFQVLRRRFVDLFNGGFISTRSITVTLSEGPVS--APNPT	743
Db	609	LPGNTVFSQPSRDR-----QILNNGTLRILOVT-PKQGHVQCVAAFPSGADPSS	657
QY	744	-----LGQDAPAGRTFDGLARVSVSEVIRDIRKNRVVFSNGCTNLSEARAR	791
Db	658	FKVSVQKQGMVREHDEAGGSLGE--PNSSVSLKQPASLK-----LSASALTGSEAGKQ	711
QY	792	LVGLASAYQOEKRVDMHLCALG--FLKQPHGLLFRGMPNPSKSPNQFWTLTQ---R	847
Db	712	-----VSGVHRKXKHRDLIHRRGDSTLRRFRE--HRRQLPLSARRIDPQWAALEKAKK	765
QY	848	NOMPADKLTHEEITT-----IAAVKRFTEEYAAINFILPPTCIGELAQFYMANLILK	900
Db	766	NSVP-----KKQENTVVKPVLAVPLVELTDEKDSGMI--PP-----	802
QY	901	YCHSQVILNTLSITTCARRPRDPSSVLHWIRKDVTSADIEQAKALLEKTEINLPWLW	960
Db	803	--DEEFMVLTKASGVPGRSPTADSGFVNHGFMTSIASGTEVSTVNPOTLQ--SEHLPDFK	859
QY	961	TTAFTSTHLVRAAM-----NORMVVLGISISIKYHGAAGNNRVFOAGNWSG--	1006

Db 860 LFSVINGTAVTKSNPSIASKIEDTTNQNPILIFP-SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGKVNCPLETFDTRTRFIACPRGGFI-----CPVTG---PSSGN 1045
Db 913 AHPVTGNN---MATYGHNTYTSFTSKASVLPQINPTESYGQIITGVSPSSD 966
RESULT 27
US-09-802-318-13
; Sequence 13, Application US/09802318
; Publication No. US20020086825A1
; GENERAL INFORMATION:
; APPLICANT: Binat, et al
; TITLE OF INVENTION: GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THERE
; TITLE OF INVENTION: AND USES THEREOF
; FILE REFERENCE: 540579-2007.1
; CURRENT APPLICATION NUMBER: US/09/802,318
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 09/632,862
; PRIOR FILING DATE: 2000-08-04
; PRIOR APPLICATION NUMBER: 60/207,821
; PRIOR FILING DATE: 2000-05-30
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 13
; LENGTH: 2597
; TYPE: PRT
; ORGANISM: Rattus sp.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2597)
; OTHER INFORMATION: 'x' can be any amino acid
US-09-802-318-13
Query Match 1.9%; Score 120.5; DB 12; Length 2597;
Best Local Similarity 18.6%; Pred. No. 0.67;
Matches 145; Conservative 113; Mismatches 287; Indels 233; Gaps 40;
QY 416 AGPHLAANPQD---RCHVLSSGSTSSNTE-----PSVDYLALICG 455
Db 274 SGAFCTKPTTIDPSLKSGLVTDQDNGSASTSPDFTPEPGSLNMTXXSGNKADNVCS 333
QY 456 FGAPLLARLLFYLCRCDAFTGGHGDAIKVVTGTFDSEIPCSICEKHTRPV---CAHT 511
Db 334 IQKP-----SRTSPATFENDYIM--LNASFSTNLVCSVDYVNHQVWQLLALS 382
QY 512 TVHRLQRM-----RFGQATQPIGVFTWMSQSDCDPLGNYPAYILIRKPGD 561
Db 383 DSPILIRKPOLTETPSLSRYKQVALRPEDIFTSIADVR-ADPFWFQOEKIVLQNLRT 441
QY 562 QTEAAKATMDQTYRATLERLFDLEQERL-----LDR-----GAPCSSEG 601
Db 442 ATTILSTIQISTDQIALPRAEMEARLKWMTILMNNPKLERTVLVGTIALSCPGKG 501
QY 602 ---LSSVIVDHPFR-----RILDTLRARIE-OTTQFMKVL---VETRD----- 639
Db 502 DPSPHLEWLLADGSKVRAPYVSEDCRILIDKNGKLEQLQADSPDAGLYHCISTNDADAV 561
QY 640 --YKIR--EGUSEATHSNALTFDPSGAF---CPITNFLVKRTHLAVODLALSQCHCV 691
Db 562 LTYRITVVPYEGESTHSGVQHVVTVTGTLDPCLSTG-----VPDASIS---WI 608
QY 692 FYGQVGEGRNFRNQFPVLRFRFVLDLFGGFISTRSTVTLSEGVPS--APNPT----- 743
Db 609 LPGNTVFSQPSRDR-----QILNNGTLRLIQT-PRDQGHYQCVAANPSGADFSS 657
QY 744 -----LQCDAPAGRTFGDGLARVSVEVIRVKNRVVFGNGCTNINSEARAR 791
Db 658 FKVSQKKQGRMVEHDEAGGSLGE--PNSVSLKQPSALK-----LSASALTGSEAGKQ- 711
QY 792 LVGLASAVQCEKRVMDMLHGALG--FLKQFHGLLFFPRGMPNPSKPNPQWFWTLQ---R 847

Db 712 ----VSGVRKKNKRDLIHRRRGDSTLRFRF--HRRQLPLSARRIDPQWAALEKAKK 765
QY 848 NQMPADKLTHEBITT-----IAAVKGFTEEYAAINFNLPTTCIGELAQFYMANLILK 900
Db 766 NSVP-----KKQENTTVKVPVPLAVPLVELTDEKDSAGMI--PP----- 802
QY 901 YCDHSOYLINTLTSITGARRPRDPSSVLHWIRKQVTSAADTETQAKALLEKTEKTELPML 960
Db 803 --DEEFVLKTKASGVPGRSPTADSGPVNHGFWTSIASGTEVSTVNPQTLQ--SEHLPDFK 859
QY 961 TTAFTSTHLVRAAM-----NORPMVVLGISISKYHGAAGNNRVFOAGWSG-- 1006
Db 860 LFSVINGTAVTKSNPSIASKIEDTTNQNPILIFP-SVAEIRDSA-----QAGRASSQS 912
QY 1007 ---LNGKVNCPLETFDTRTRFIACPRGGFI-----CPVTG---PSSGN 1045
Db 913 AHPVTGNN---MATYGHNTYTSFTSKASVLPQINPTESYGQIITGVSPSSD 966
RESULT 28
US-10-329-079-11
; Sequence 11, Application US/10329079
; Publication No. US20030198981A1
; GENERAL INFORMATION:
; APPLICANT: FARNET, Chris
; APPLICANT: ZAZOPOULOS, Emmanuel
; APPLICANT: STAPEA, Alfredo
; TITLE OF INVENTION: GENES AND PROTEINS INVOLVED IN THE BIOSYNTHESIS OF LIPOPEPTIDES
; FILE REFERENCE: 3002-1105
; CURRENT APPLICATION NUMBER: US/10/329,079
; CURRENT FILING DATE: 2002-12-24
; NUMBER OF SEQ ID NOS: 66
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 11
; LENGTH: 5245
; TYPE: PRT
; ORGANISM: Streptomyces fradiae
US-10-329-079-11
Query Match 1.9%; Score 120; DB 14; Length 5245;
Best Local Similarity 20.2%; Pred. No. 2.6; Indels 464; Gaps 58;
Matches 282; Conservative 138; Mismatches 434;
QY 102 PSSAAPNLFRACNAARERFGSRGCGPP-----VDGAVETTGAEICTRL-----GL 147
Db 464 PAAEPAADGLEAVECDTFARQAAATPEAPAVVGGPVALTFAEADARVSRLARLLISGA 523
QY 148 EPENTILYLVLTALPKEAVFMCNVLHYGGLDIVINHGDVIRIPLFPVQLFWPDVNLV 207
Db 524 GPS-----VAVAVCLDRNALWPTTV-----LAVLRSGAVHVPL----- 556
QY 208 PDPFNTHRSIGEGFYPTFPYNTGLCHLIHDCVIAPMAVALRVNRVNTAVARGAAHLAF- 266
Db 557 -DPRSPHER-----LAAVERD--VAPLLVLAERATEAAVADLAAPVLV 597
QY 267 -DENHEGAV-----LPDITYTYFQSSSG-----TTTARG-----A 297
Db 598 DDPSTEAAIDALDGPVTDADRTAPLLPGHAAVYIHTSGTGRPKGVTVDRHGLSRLLQA 657
QY 298 RENDVNSTSKPSGSG-GEERLASI-----MAADTALHA----- 330
Db 658 HRRVTSRIRPSAGGPGRAAHVSSFSFDASWDPLLAHVAGHELEHDEIDLRFPDGVVAY 717
QY 331 -----EVIFNTGIYEE--TPT-----DIKEMPMFIGMEGTLPRLNAL 365
Db 718 FRDRRIDYVDLPTFYRSLLDAGLLEEGFPCCPSLVALGGEAMDGELWELRAAARVTAM 777
QY 366 GSY-----IARVA-----GVIGAMVFPNSALYLTVEVDSGWTAKDGGPSPENR 411
Db 778 NTYGTETAVDAVTVVLGDLPGTIGRPV--PRWAY--VLDAGLRVPVPGVLGELY-- 830
QY 412 FYQFAGPHLAANPQDTRDGHVLSQSGSTSSNTEFSDVILALICGFCAP-----LILAR 463

Db 831 ---LAGPVARGVGLQ---HALTAER-----FVACPPKCGRMVYRTGDLAR 871
QY 464 L-----LFYLERCD-----AGAF-----TGGHGDAKYV 487
Db 872 WLPDGHVAVYVGRDEQVKIRGEPEGEVEAALRELEGVAAAATVRETPGTRELGVV 931
QY 488 TGTDFSEI PCSCEKTRPVCAHTVHRLRQMP-----RFGQATRQIGVFGTWSQY 541
Db 932 VGTDPDAD-----DARLRA-----EVLARLDRDLPHVPSAFVRLBELPVNTSGKLDRA- 981
QY 542 SDCDPLGNVAPYLILRKPGDQTEAAKATQDVTYRATLERLFIDLEQERLLDRGAPCSSG 601
Db 982 --ALPAPDPADPPAGRRP-----RTALESEVCALPAEVL-----G 1014
QY 602 LSVIVDHTFRILDTLRAIRBQTTQFMKVLVETRDYKIREGLSEATHMALPDPVPS 661
Db 1015 AGSVGIDDDFFGRGGSILS-----IQVGSAR-----RAGL-----TFTYRQVFEFLT 1058
QY 662 GAFCEPITNPLVKTSLAVVQDLALSQCHVYQOQVEGRNFRNQFOVFLRRFRVDFLNGG 721
Db 1059 PAALAAA---ARITDAAGDEDPALA-----VGP-----LPLLPVVAETLAAGG 1098
QY 722 FISTRSITVLSGPPVSAPNPTLQDAPAGRTPDGDLARVSVEV-----IRDIRVKNR- 774
Db 1099 PVHSYNQSVVLASPPDAAPDDV--RDALQALLDRHDALRVHAAPAGPGLWDLRVEEAG 1156
QY 775 VVESGNC-----TNLS--EAPARLVGLASAYORQEKVDMHLGALGELLKQFHGLLFP 826
Db 1157 TVAAERCLRIDATGMSDEELAAQAAVTA-----RACLDPLAGAL-----VSAMVFD 1206
QY 827 RGMPP-----NSKSPNQW-----FWTLQRNQMPADKLTHBEEITIAAVKRF 869
Db 1207 RGRPGELVLIHHLAVDGVSNRILLGLDREAWRALRAGERPELPTGTSLATWAT--RL 1264
QY 870 TEBYAAINFNLPTTCIGELAQYMANLILKYCDHSQYLINTLSITIGARRPD--PSS- 927
Db 1265 TERAT-----DPAVTAQL--DHWATLADGAPGSRPLDRTRDVTATSAVLSGELPASL 1316
QY 928 -----VLHWI--RKDVTSAADITQAKALLEKTENL----- 956
Db 1317 TTDLLGPAPAFAGVNDLLLTAFALAVAHWGEEDAPVLVDLESHG-----RTEELVPG 1371
QY 957 PELWTTA--FTSHLVRAAMNQRPMVVLGISISKYHGAQN-----NRVFOAGNWSGLNG 1009
Db 1372 ADLSRTVGNFTSVHPVRLAAGR-----VTAADLAERAPAVGDAIKRIKEQLRAVPDGGGLGH 1427
QY 1010 G--KNWCP-----LFTFDRTRRFLIACPPGGFICPV--TGPSSGNRETTLSQD 1053
Db 1428 GLLRHLNPDTPAPRLGLARARFGFNLGRFAEQGAGEDSNWLLGSGPAGQHPDPLDHE 1487
QY 1054 VRGIIVS-----GGAMVQLAIVATVVRVAVGARQAQHVAFDDWLSLTDDEFLARDLELHDQ 1108
Db 1488 IEVNVVTAEGPDGPRLLITRWYATGL-----LTBEE----- 1518
QY 1109 IIOLETPWTEGALAEVAKILDEKTTAG--DGETPTNLA 1145
Db 1519 -VRRLTRWSL--ALHAV--VGHATAGAGGUSPSDVA 1551

RESULT 29
US-10-425-114-71520
; Sequence 71520, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E.
; APPLICANT: Tabaska, Jack E.
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B

; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 71520
; LENGTH: 452
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: UC-ZMFLB73270E12_FLI pep
US-10-425-114-71520

Query Match 1.9%; Score 118; DB 12; Length 452;
Best Local Similarity 22.7%; Pred. No. 0.052;
Matches 91; Conservative 36; Mismatches 132; Indels 142; Gaps 22;

QY 195 PVQLFMPDNLVLPDPNTHRSIGEGFVPTPPYNTGLCHLHDCVIAPMAVALRVNV 254
Db 90 PVQWRPVPVTEAVPQ---HH---QDDIETS--NSGSKIIEDCI----- 126
QY 255 TAVARGAAHLAFDENHEGAVLPDPITVTFQSSSGTGTARGARRNDVNSTKPSPSG-- 312
Db 127 -----ASSN-----LPPD-----GTTNVVETANDASSKNLSFGYS 160
QY 313 -----QFERLLA-----SIMAADT-----ALHAEVIFNT 336
Db 161 STKVVIDHAEISGFNKDLAGSNVFGTHSSSVEAVQSRQLDYSHFISLPLALHDPDLVNL 220
QY 337 GIYSETPDIKEWPMFIMGECTLPRNALGSYARVAGVICAMVFPSPNSALYLTEVEDSG 396
Db 221 NYFOSS-----ILGEENS-----NKGQSQS---EGSIGEMDY-----DHK 252
QY 397 MTEAKDGGPGSFNRYQ---FAGP---HLAA-----NPQTRDGHVLLSSQST---G 439
Db 253 QAEAKWAKGAKGQSDFGIDKISIFIKPETPHLTVMMLKLNKERIDKASDVLQSVSTQVNEA 312
QY 440 SSNTEFSVDYLLALCGAPLALLBYLERCDAAGTGGHGDALKVYTGTFDSEI PCSL 499
Db 313 LENPISIQURLGLTCKMGFPAPKARVW--YVPVLEVS--EGRLAHACKVITDAF---IKAGL 367
QY 500 C-EKHTPVCATHTVTHRLQRMPRFQAT---RQPIGVFG 535
Db 368 VFERDRELKHAIVMVRHRSKRNKENTWTDSPDARGIFG 408

RESULT 30
US-10-084-846A-8
; Sequence 8, Application US/10084846A
; Publication No. US20040006026A1
; GENERAL INFORMATION:
; APPLICANT: WEITNAUER, GABRIELE
; APPLICANT: MUHLENWEG, AGNES
; APPLICANT: TREFFZER, AXEL
; APPLICANT: BECHTHOLD, ANDREAS
; TITLE OF INVENTION: AVILAMYCIN DERIVATIVES
; FILE REFERENCE: 1974-005
; CURRENT APPLICATION NUMBER: US/10/084,846A
; CURRENT FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: PCT/EP01/09815
; PRIOR FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: DE 101 09 166.4
; PRIOR FILING DATE: 2001-02-25
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: Patentin Ver. 3.2
; SEQ ID NO 8
; LENGTH: 19608
; TYPE: PRT
; ORGANISM: Streptomyces viridochromogenes
; FEATURE:
; OTHER INFORMATION: Protein 3: amino acid sequence encoded by coding strand 1.
; OTHER INFORMATION: Start codon: atc, Start position: nucleotide 3.
US-10-084-846A-8

Query Match 1.9%; Score 118; DB 15; Length 19608;

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Best Local Similarity 19.7%; Pred. No. 44;
Matches 240; Conservative 133; Mismatches 443; Indels 404; Gaps 62;

QY 106 APNUTRACNAAREBFGFSRC---QGPVVGAVETGAE-----ICTRLGLEP----- 149
Db 11736 APHRSPTTGAPGPHARRCERGRGIPGA---RGAEPHPHARSFLRSPDSAPSNLL 11792
QY 150 ---ENTILYLVTALFKAEVFMCMVFLHYGGLDIVH---INHG-----VIRPLFP 195
Db 11793 ENLENNAKQIRSAKGP-----GGLSPSHGCCRHGQSHAVGQALVQLRPLPVP 11842
QY 196 VQLFMPD-----VNRVLVPPFENTHERSIGEGFVY-PTPEYNT 231
Db 11843 V-LGVPAHVGCEALLERHTGCVABEAGVAPV-----SLPVGYLDPVPAQA 11895
QY 232 GLCHLIHDCVIAPMAVALRVNVTAVARGAAHLAFDENHE-----GAVLP-PIITYTYFQ 285
Db 11896 GVOQLLRQFQIGQLG---RARDVVDLPR---QPAFGQPDQPHVGVHVPDVAALPVQ 11949
QY 286 SSSSGTITARGARNDVNSISKPSGGFERRLAS--IMADTALHAEVIFNTGIVEETP 343
Db 11950 RDAVAVQPGGEQRNDL-----LRELIGPVVVAAPRAHRQ----- 11985
QY 344 TDIKEMPMFIGWGTLPRLNA-LGSIYARVAG-----VICAMVFSNSA 386
Db 11986 ---PMGAGV-CEGDEHVAARLGRVRCVGRDRLVPGARLDAAVHLVGGDLHDSGRA 12038
QY 387 ---LYLVEDEDS---GMTAKDGGGFSFNRYQ-----PAGPHLAANQTTDRDGHVLS 434
Db 12039 GLQARLHECLDALHIGTYERRRVDGRPDVDFRGREVDHQIVAGDHGEQFGI-ADVAVHE 12097
QY 435 SQSTGSSNTEFSVDYLALICGFGAPLLARLLFYLERCDAGFTGGHGDALKYVTG----- 489
Db 12098 GVPAGDRLOVRQVPGVGQVQVGHGPRRIAV-----PDQFAHVLGADEAR 12141
QY 490 -TFDSEIPCSICEKHTREPVCAHTTHRLRQRMFRFGQATROPICGVFGTMNSQVSDCDPLG 548
Db 12142 STDQDQVSPF---RTRAAVSHVPSRLHRRVPRLRVPQPTWT-RLWSPSTSRCAVDV 12197
QY 549 NYAPYLILKPGDQTEAAKATMDQTYATLERFLIDLEQERLLD-----RGAPCSSEGLSS 604
Db 12198 RGAFTSRSRPTESSTRATESIAPRSTIB-YWISLCATQLQPSMEVKGPRESCCTTVSG 12256
QY 605 VIVDHPTEPR-----ILDTLR--ARIBQTTQPMKVLVEYRDKIREGSEATHSNA-- 654
Db 12257 PMTAGTWRBEIPAPASTITRPTSSLASSTSPSRV---SRDSSRCRFRISRTSVTLATS 12313
QY 655 ---LTPDYSYGAFCPITNFLVKRTHLAVVQDLALSOCHCVFQGOVEGRNFRQ----- 705
Db 12314 FOYRSITVEPTS---CP-----WSASHC---RASVISSSFRQDGRMP 12349
QY 706 ---FQVLRBRFVDLFGGPISTRSIITVTLSEGPVGAAPNTL-GQDAPAGRT 753
Db 12350 ATASCTAELKAYTPTIARSL--LGSWGP-STTAVTRPSS---SSATPNLGSATRASMT 12403
QY 754 PDGDLAR---VSVEVIRDVRKRVVFGNCTNLSAARABVLGLAGAYQREKRVMDLH 810
Db 12404 CAAGLSRKSATKSTMTPTTILSPRYM---TKSSSPKSRDSTGASASPR----- 12449
QY 811 GALGELLKQFCHLLPFRGMPNPKSPNQFW-----TLLQRNQPADKL--THEEIT 861
Db 12450 GASCMWVTS-----RPNs-APSPTEAWISAAPVTIPTSDIPASLMESTERTV 12498
QY 862 TIAAVKRFTEEVAAL--NFINLPPTCIGELAQFYMANILKYCHDSQVLIINTLSIITGA 919
Db 12499 LLATGTSCLAEVCVIGRSLEPTFT-----NMSAFISHLRSA----- 12536
QY 920 REPRDPSSVLHWIRKDVTSAADETQAKALLEKTENLPBELWTTAFTSTHLVRAAMQRP 979
Db 12537 ---PSDQV---VSRELOWASNVSAQORSYMRVQVFPFRFCRLARPPHAPVPCHELRSQ 12589
QY 980 VV-----LGISISKYHGAAGNRRVFCAGNWSGLNGKNCVPLTFPDRTRRFTIACPRG 1032

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Db 12590 CQVDWAPSAVGSVER---SVRSTMSLAVGSFQKMLAGTS-----RPRRF----- 12631
QY 1033 GFICPVTGPSSGNRTTLLSDQVRGIIVSGGAWQLAIIVTVVAVGARAQHMAFDDWLSL 1092
Db 12632 ---SSRRRTTITVITSSPCSTSG-----RRTCRVAGASRISCAI---CSR 12670
QY 1093 TDDEFIARLDELBHQIIQTLETPTWVEGALBAVKILDEKTTAGDGETPTNLAFNFDSC 1152
Db 12671 TSSS-----TRERSSGD-----R 12684
QY 1153 PSHDTTNNVLNITSGSNI 1172
Db 12685 PANDTTSASASPPGSSVSGA 12704

RESULT 31
US-10-231-956A-325
; Sequence 325, Application US/10231956A
; Publication No. US2004005323A1
; GENERAL INFORMATION:
; APPLICANT: Lorens, James B.
; APPLICANT: Xu, Weiduan
; APPLICANT: Bogenberger, Jakob
; APPLICANT: Holland, Sacha
; APPLICANT: Rigel Pharmaceuticals, Incorporated
; TITLE OF INVENTION: Modulators of Angiogenesis
; FILE REFERENCE: 021044-004100US
; CURRENT APPLICATION NUMBER: US/10/231,956A
; CURRENT FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 522
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 325
; LENGTH: 1479
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-231-956A-325

Query Match 1.8%; Score 114.5; DB 12; Length 1479;
Best Local Similarity 18.5%; Pred. No. 0.97;
Matches 204; Conservative 118; Mismatches 441; Indels 341; Gaps 47;

QY 162 FKEAVFMCMVFLHYGGLDIVHNGDVIPIPLFPVQLEMPD--VNRVLVPPDPNTHRSIG 219
Db 130 FKGLASLEQYILHFNQIET--LDPSDFQHLPKLE-RLFLHNNRITHLVPGTFN-HLESKM 185
QY 220 EGFVYPTPEYNTGLCHLIHDCVIAPMAVALRVNVTAVARGAAHLAFDENHEGALPDDI 279
Db 186 RLRLDS-----NTLHC---DCBILWLADLLKTYAESGNAQAAAIACEYPRR----- 227
QY 280 TTYTFQSSSGSTTARGARNDVNSISKPSGGFERRLASIMAADTALHAEVIFNTGIY 339
Db 228 ---IQRSVATITPEELNCERPRIITSEPO-----DADVTSGNTVY 264
QY 340 EETPTDIKEWPMFIGMEG-----TLPRINAL-----GSYARVAVGVI 377
Db 265 FTRASGNPKPEIILWLRNNNELSMKTDRLNLLDDGTLMIQNTQETDQGIYOCMAKNVAG 324
QY 378 AMVFSPNALYLTEVSDSGMTEAKOGGPGFSFNRYQFAGPHLAANPQDTR-----DCHVL 433
Db 325 -----EVKTQVETLRYFGSP-----ARPTFVIQFQNTVVLVGSVTL 361
QY 434 SSOSTG-----SSNTEFSVDYLALICGFGAPLLARLLFYLERCDAGFTGGHGA 483
Db 362 ECSATGHPPPRISWTGDRTPLEVDPRVNIPTSGG-----LYIQ-----NVVQSGSEY 410
QY 484 LKVTGTGTFDSEIPCSICEKHTREPVCAHTTHRLRQRMFRFGQATROPICGVFG-TMNSQVS 542
Db 411 ACATNNIDS-----VHATAFIIVQALPQFTVTPQDVRVIEGQTVDFQ-- 453
QY 543 DCBPLGNAPYILRLRPGDQTEAAKATMDQTYATLERFLIDLEQERLLDRGA-PCSSEG 601
Db 454 -CEAGNPPFPVIAITKGGSQLSV-----DRRHVLSSGTLRISGVALHDQGOYEQAVN 506

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QY 602 L--SSVVDHPTFRRLDTRARIEBQTTTQPMKVLVETRDYKIREGLSEATHSMALTFDP 659
Db 507 IIGSKQVVAHLTVQRPVTFPASIFSDTT-----VEVGANVQLPCSSQGEPEPAITWNK 560
QY 660 YGAFPCPTNLFVKRTHLAVODLA---LSQCHCVFYGOQVEGRNF--RNQFQPVLRERF 714
Db 561 DGQVTEGKPHISPEGLTINDVGPADAGRYECV-----ARNTIGSASVSMVLSVNV 613
QY 715 VDLFNGG--FIST-----RSITVT---LSEGPVSAPNPTLG-----QDA 748
Db 614 PDVSRNGDPFVATSIIVEAIAIVDRAINSTRTHLFDSPRSPNDLLALFRYPRDPYVEQA 673
QY 749 PAGRTFDGLARVSEVIRDIRVK-----LSEGPVSAPNPTLG-----NRVFGNCTNLSEARAR 791
Db 674 RAGEIFERTLQIQHVVQGLVMDLNGTSYHYNDLVSPQYLNLIANLSGCT-----AHR 728
QY 792 LVGLASAYQROEKV-----DMLHGALGFLKQFHGLL-----PPRGMPN-----832
Db 729 VNNCSDMCFHOKYRTHDGTGTCNNLQHPMVGASLTAFERLLKSVYENGFTPRGINPHRLYN 788
QY 833 -----SKSPNPQFWTLQORNQMPADKLTBEITIAAVK--RFTTEE 872
Db 789 GHALPMPRLVSTLIGTETVTFDEQFTHLMQWQGF---LDHDLDSIVVALSQARFSDG 844
QY 873 YAAINFINLPPTCI-----GELAQFYMANLILKYCHDSQYLNLTLSIITGA 919
Db 845 QHCSNVCNSNDPPCFSVMIPPNDSPRARSARGCMFFVRS-----SPVCGSGMTSLLMNS 896
QY 920 RPRDPSSVLHWIRKDVTSADIEFQAKALLEKTENLPELWTATFTSTH--LVRAAMNQR 977
Db 897 VYPREQINQL-----TSYIDASNYYGSTEARSIRDL-----ASHRGLLRQGIQVR 943
QY 978 PMVVLGISISKYHGAAGNRRVFOAGNWSGLNGKNVCPLFTFDRTRFRFIACPR-----GG 1033
Db 944 -----SGKPLLPATGPPT-----CVRDENESP 967
QY 1034 FICPVTGSSGNRETTLSQ-----VRGIIVSGGAMVOL-----AIVATVVRVAVCARAQ 1082
Db 968 IPCFLAGDHRANQGLGTSHTLWFREHNRRIATELLKLNPHWDGDTIYYETRKIVGAEIQ 1027
QY 1083 HMAFDDWLSLTDDEFLARDLEELH 1106
Db 1028 HITYQHWLPKILGEVGMRTLGEVH 1051

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RESULT 32

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US-10-211-462-87
; Sequence 87, Application US/10211462
; Publication No. US20040033495A1
; GENERAL INFORMATION:
; APPLICANT: Murray, Richard
; APPLICANT: Glynn, Richard
; APPLICANT: Watson, Susan R.
; APPLICANT: Aziz, Natasha
; APPLICANT: Eos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis, Compositions and
; TITLE OF INVENTION: Methods of Screening for Angiogenesis Modulators
; FILE REFERENCE: 018501-006200US
; CURRENT APPLICATION NUMBER: US/10/211,462
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US 09/784,356
; PRIOR FILING DATE: 2001-02-14
; PRIOR APPLICATION NUMBER: US 09/791,390
; PRIOR FILING DATE: 2001-02-22
; PRIOR APPLICATION NUMBER: US 60/310,025
; PRIOR FILING DATE: 2001-08-03
; PRIOR APPLICATION NUMBER: US 60/334,244
; PRIOR FILING DATE: 2001-11-29
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 87
; LENGTH: 1496
; TYPE: PRT

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; ORGANISM: Homo sapiens
US-10-211-462-87
Query Match 1.8%; Score 114.5; DB 12; Length 1496;
Best Local Similarity 18.5%; Pred. No. 0.99;
Matches 204; Conservative 118; Mismatches 441; Indels 341; Gaps 47;
QY 162 FKSAVFNVCNVLHYGLDVIHINHDVIRIPLFPVQLFMPD--VNRIVDPFPNTHRSIG 219
Db 147 FKGLASLEQYLHFNQIET--LDPDSFQHLPKLE-RLFLHNNRITHLVPGTFN-HLESMK 202
QY 220 EGFVYPPPTNTGLCHLHDCVIAPMAVLRVNVAVARGAAHLAFDENHEGAVLPDDI 279
Db 203 RLRLDS-----NTLHC-----DCBILWLADLLKTYAESGNAQAALICEYPRR-----244
QY 280 TYTYFSSSGTTFARGARRNDVNSTKPSGSGFERRLASIMAADTALHAEVIFNTGIY 339
Db 245 ---IQGRSVATITPEELNCERPRITSEPO-----DADVTSGNTVY 281
QY 340 EETPTDIKEPMFTGMEG-----TLPRINAL-----GSYTARVAVAGIG 377
Db 282 FTCRAENGPKEIWLNNNELSMKTDUSRLNLLDDGTLMIONTQETDQGIYQCAKXVAG 341
QY 378 AMVESPNALYLTVEDESGMTEAKDGGPSPFNRFYQFAGPHLAANPQTR-----DGHVL 433
Db 342 -----EVKTQEVTLRYFGSP-----ARPTFVIQPTNEVLVGESVTL 378
QY 434 SSQSTG-----SSNTEFSVDYLALICGAPLARLLFVLECDACAGFTGGHGA 483
Db 379 ECSATGHPPPRISWTRGDRTPLPVDPVNPVTPSGG-----LYIQ-----NVVGDSGEY 427
QY 484 LKYVTGTFDSIEPCSLCEKHTRPVCAHTTVHRLRQMRPFCQATROPIGVFG-TMNSQYS 542
Db 428 ACSATNIDS-----VHATAFIIVQALPQFTVTFDQRVVIEGQTVDFQ-- 470
QY 543 DCDPLGNVAPYLILKRPQDQTEAAKATWQDYTRATLERLIDLEQERLLDRGA-PCSSEG 601
Db 471 -CEAKGNPPVIAWTKGGSQLSV-----DRRLHVLSSGTLRISGVALHDDGQVTECAVN 523
QY 602 L--SSVVDHPTFRRLDTRARIEBQTTTQPMKVLVETRDYKIREGLSEATHSMALTFDP 659
Db 524 IIGSKQVVAHLTVQRPVTFPASIFSDTT-----VEVGANVQLPCSSQGEPEPAITWNK 577
QY 660 YGAFPCPTNLFVKRTHLAVVQDLA---LSQCHCVFYGOQVEGRNF--RNQFQPVLRERF 714
Db 578 DGQVTEGKPHISPEGLTINDVGPADAGRYECV-----ARNTIGSASVSMVLSVNV 630
QY 715 VDLFNGG--FIST-----RSITVT---LSEGPVSAPNPTLG-----QDA 748
Db 631 PDVSRNGDPFVATSIIVEAIAIVDRAINSTRTHLFDSPRSPNDLLALFRYPRDPYVEQA 690
QY 749 PAGRTFDGLARVSEVIRDIRVK-----NRVFGNCTNLSEARAR 791
Db 691 RAGEIFERTLQIQHVVQGLVMDLNGTSYHYNDLVSPQYLNLIANLSGCT-----AHR 745
QY 792 LVGLASAYQROEKV-----DMLHGALGFLKQFHGLL-----PPRGMPN-----832
Db 746 VNNCSDMCFHOKYRTHDGTGTCNNLQHPMVGASLTAFERLLKSVYENGFTPRGINPHRLYN 805
QY 833 -----SKSPNPQFWTLQORNQMPADKLTBEITIAAVK--RFTTEE 872
Db 806 GHALPMPRLVSTLIGTETVTFDEQFTHLMQWQGF---LDHDLDSIVVALSQARFSDG 861
QY 873 YAAINFINLPPTCI-----GELAQFYMANLILKYCHDSQYLNLTLSIITGA 919
Db 862 QHCSNVCNSNDPPCFSVMIPPNDSPRARSARGCMFFVRS-----SPVCGSGMTSLLMNS 913
QY 920 RPRDPSSVLHWIRKDVTSADIEFQAKALLEKTENLPELWTATFTSTH--LVRAAMNQR 977
Db 914 VYPREQINQL-----TSYIDASNYYGSTEARSIRDL-----ASHRGLLRQGIQVR 960
QY 978 PMVVLGISISKYHGAAGNRRVFOAGNWSGLNGKNVCPLFTFDRTRFRFIACPR-----GG 1033

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Db 961 -----SGKPLLPATGPPT-----CMRDENESP 984

QY 1034 FICPVTGSSGNRETTLSQ---VRGIIVSGAMVOL-----AIYATVVRAGARQ 1082

Db 985 IPCFLAGDRANEQGLTSMHTLWFRHNRIATELLKLNPHWDGDIYYETRKIVGAEIQ 1044

QY 1083 HMAFDDWLSLTDDEFLARLDEELH 1106

Db 1045 HITYQHWPILKEVGMRTLGEYH 1068

RESULT 33

US-10-021-660-125

Sequence 125, Application US/10021660

Publication No. US20030152926A1

GENERAL INFORMATION:

APPLICANT: Murray, Richard

APPLICANT: Glynn, Richard

APPLICANT: Watson, Susan R.

APPLICANT: EOS Biotechnology, Inc.

TITLE OF INVENTION: No. US20030152926A1 Methods of Diagnosis of Angiogenesis, Compositions and Methods of Screening for Angiogenesis

TITLE OF INVENTION: Compositions and Methods of Screening for Angiogenesis

TITLE OF INVENTION: Modulators

FILE REFERENCE: 018501-000710US

CURRENT APPLICATION NUMBER: US/10/021,660

CURRENT FILING DATE: 2001-12-06

PRIOR APPLICATION NUMBER: US/09/784,356

PRIOR FILING DATE: 2001-02-14

PRIOR APPLICATION NUMBER: US 09/637,977

PRIOR FILING DATE: 2000-08-11

NUMBER OF SEQ ID NOS: 135

SOFTWARE: FastSeq for Windows Version 3.0

SEQ ID NO 125

LENGTH: 1496

TYPE: PRT

ORGANISM: Homo sapiens

US-10-021-660-125

Query Match 1.88; Score 114.5; DB 14; Length 1496;

Best Local Similarity 18.58; Pred. No. 0.99;

Matches 204; Conservative 118; Mismatches 441; Indels 341; Gaps 47;

QY 162 FKEAVFNCVFLHYGGLDIYHINHGVDVIRIPFPVQLFMPD--VNRIVDPDPFNTHRSIG 219

Db 147 FKGLASLEQLYLFHNQIET--LDPDSFQHLPKLE-RLFLHNRIITHLVPGTFN-HLESMMK 202

QY 220 EGFVYPTFPFTGLCHLHCVIAPMAVALRVNVTAVARGAAHLAFDENHCEGAVLPDDI 279

Db 203 RLRLDS-----NTLHC-----DCEILWLADLLKTVAESGNAQAACEYPRR-----244

QY 280 TTYTFQSSSGTITARGARNVDNSTKSPSGGFERRLASIMAADTALHAEVIFNTGIY 339

Db 245 ----IQRSVATITPELNCERPRITSEPO-----DADVTSGNTVY 281

QY 340 EETPTDKENPMFTMGEG-----TLPRNLAL-----GSYTRAVAGVIG 377

Db 282 FTRCAEGNPKPEIILWLNNSLSMKTSRLNLLDDGLTMIQNTQETDQGIYQCMKXNVAG 341

QY 378 AMVSPNSALYLTVEDSGTEADGGGPGSFNRFYQFAGPHLAANPQTD-----DGHVL 433

Db 342 -----EVKQEVTLRVFGSP-----ARFTFVIQNTVELVGSVTL 378

QY 434 SSQSTG-----SSNTFFSYDYIALICGFGAPILARLLFYLERCDAGFTGGHGA 483

Db 379 ECSATGHPPPRISWTRGDRTPLPVDPVRVNIPTSGG-----LYIQ-----NVVQGDSEY 427

QY 484 LKYVTGTFDSIPCSLCEKHTRPVCAHTVHLRQMRPFGQATRQPIGVFG-TMNSQYS 542

Db 428 ACSATNNDS-----VHATAPIIVCALPQFTVTPQDRVIEGQTVDFQ-- 470

QY 543 DCDPLGNVAPYLIRKPGDQTEAAKATMQDTYRATLERFLIDLEQERLLDRGA-PCSSSEG 601

Db 471 -CEAKGNPPVIAWTKGSQSLV-----DRHLVLSGGTLRISGVALHDQGOVECCAVN 523

QY 602 L--SSVIVDHTFERILDTLRARIEQTTQFMKVLVETRDYKIREGLSEATHSMAITFDP 659

Db 524 IIGSKVVAHLUTQPRVTPVFPASIPSDTT-----VEGANVOLPCSSQGEPEPAITWNK 577

QY 660 YSGAFCEPITFLVXKTHLAVVQDLA---LSQCHCVFYQQQVEGRNF--RNOQFQVILARRF 714

Db 578 DGVQVTEGKPHISPEGFLTINDVGPADAGYECV-----ARNTTIGSASVSMVLSVNV 630

QY 715 VDLFNGG--FIST-----RSITVT---LSEGPVSAPNPTLG-----QDA 748

Db 631 PDVSRNGDPFVATSIVEAIAITVDRAINSTRHLFDSRPSRNDLLALFRYPRDRPYTVEQA 690

QY 749 PAGRTFDGLARVSVEVIRDIRVK-----NRVVFSGNCTNLSEAAAR 791

Db 691 RAGEIFERTLQIQEHVQHGLMVDLNGTSYHNDLVSPQYLNLIANLSGCT-----AHR 745

QY 792 LVGLASAYQROEKV-----DMLHGLGFLLLKQFHLGIL-----FPRGMPPN---832

Db 746 VNNCSDMCFHQYRTHDGTCCNNLQHPMMWASLTAFERLLKSVYENGFTPRGINPHRLYN 805

QY 833 -----SKSPNPQWFTLLQRMOPADKLTHEEITITAAVK--RFTEE 872

Db 806 GHALPMPRLVSTTLIGTETVTPDEQFTHMLMQWQF---LDHLDLSVVALSQARPSDG 861

QY 873 YAAINFNLPTCI-----GELAQFYVAMILKYCDHSQYVINTLTSITGA 919

Db 862 QHCSNVCSDPPCFVSMIPPNDSRARSARGCMFVRS-----SPVCGSGMTSLMNS 913

QY 920 RRPDPSSVLHWIRKDVTSADIEQAKALLEKTENPELWTFTASTH--LVRAAMNOR 977

Db 914 VYPREQINQL-----TSYIDASNVSSTHEARSIDL-----ASHRGLLRQGIQV 960

QY 978 PMVLGISISKYHGAAGNRRVFOAGNWSGLNGKNCVCLFTFDRTRFIIACPR-----GG 1033

Db 961 -----SGKPLLPATGPPT-----CMRDENESP 984

QY 1034 FICPVTGSSGNRETTLSQ---VRGIIVSGAMVOL-----AIYATVVRAGARQ 1082

Db 985 IPCFLAGDRANEQGLTSMHTLWFRHNRIATELLKLNPHWDGDIYYETRKIVGAEIQ 1044

QY 1083 HMAFDDWLSLTDDEFLARLDEELH 1106

Db 1045 HITYQHWPILKEVGMRTLGEYH 1068

RESULT 34

US-10-331-496A-28

Sequence 28, Application US/10331496A

Publication No. US20030228305A1

GENERAL INFORMATION:

APPLICANT: FRANTZ, GRETCHEN

APPLICANT: HILLAN, KENNETH J.

APPLICANT: PHILLIPS, HEIDI S.

APPLICANT: POLAKIS, PAUL

APPLICANT: SMITH, VICTORIA

APPLICANT: SPENCER, SUSAN D.

APPLICANT: WILLIAMS, P. MICKEY

APPLICANT: WU, THOMAS D.

APPLICANT: ZHANG, ZEMIN

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND TREATMENT OF TUMOR

TITLE OF INVENTION: TREATMENT OF TUMOR

FILE REFERENCE: P5014R1-PCT

CURRENT APPLICATION NUMBER: US/10/331,496A

CURRENT FILING DATE: 2002-12-30

PRIOR APPLICATION NUMBER: US 60/345,444

PRIOR FILING DATE: 2002-01-02

PRIOR APPLICATION NUMBER: US 60/351,885

PRIOR FILING DATE: 2002-01-25

PRIOR APPLICATION NUMBER: US 60/360,066

PRIOR FILING DATE: 2002-02-25

PRIOR APPLICATION NUMBER: US 60/362,004

PRIOR FILING DATE: 2002-03-05


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; PRIOR APPLICATION NUMBER: US 60/366,869
; PRIOR FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: US 60/366,284
; PRIOR FILING DATE: 2002-03-21
; PRIOR APPLICATION NUMBER: US 60/368,679
; PRIOR FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: US 60/404,809
; PRIOR FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 60/405,645
; PRIOR FILING DATE: 2002-08-21
; NUMBER OF SEQ ID NOS: 95
; SEQ ID NO 28
; LENGTH: 1496
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-331-496A-28

Query Match
Best Local Similarity 1.8%; Score 114.5; DB 15; Length 1496;
Matches 204; Conservative 118; Mismatches 441; Indels 341; Gaps 47;

QY 162 FKEAVFMCNVLHYGGDLIVHINHGDIIRIPFPVQLFMPD--VNRLLVPDPFNTTHRSIG 219
DB 147 FKGLASLEQLYLFNQIET--LDPDSFQHLPKLE-RLFLHNNRIITHLVPGTEN-HLESKM 202
QY 220 EGFVYPTFPYNTGLCHLHDCVIAPMAVALVRNVTAVARGAAHLAFDENHEGAVLPDDI 279
DB 203 RLRLDS-----NTLHC-----DCEILWLADLLKTYAESGNAQAAACEYPRR----- 244
QY 280 TYTYFQSSSGTGTARGARRNDVNSTSKPSPSGGFERRLASIMAADTALHAEVIFNTGIY 339
DB 245 -----IQGRSVATITPEELNCERPRITSEPO-----DADVTSGNTVY 281
QY 340 EETPTDIKEWPMFIGMEG-----TLPLRLNAL-----GSYTRAVAGVIG 377
DB 282 FTCEAENKPKPEIILWRNNNELSMKTDRLNLLDDGTLMQNTQETDQGIYQCMARKVAG 341
QY 378 AMVFSNSALYITEVEDSGMTEAKDGGCPSPFRFYQFAGPHLAANPOTDR-----DGHVL 433
DB 342 -----EVKTQEVTLRYFGSP-----ARPTFVIQPNTEVLVGSVTL 378
QY 434 SSQSTG-----SSNTFSDVYALICGFGAPLLARLLFYLRCDAGFTGGHGA 483

; PRIOR APPLICATION NUMBER: US 60/366,869
; PRIOR FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: US 60/366,284
; PRIOR FILING DATE: 2002-03-21
; PRIOR APPLICATION NUMBER: US 60/368,679
; PRIOR FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: US 60/404,809
; PRIOR FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 60/405,645
; PRIOR FILING DATE: 2002-08-21
; NUMBER OF SEQ ID NOS: 95
; SEQ ID NO 28
; LENGTH: 1496
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-331-496A-28

Query Match
Best Local Similarity 1.8%; Score 114.5; DB 12; Length 1498;
Matches 204; Conservative 118; Mismatches 441; Indels 341; Gaps 47;

QY 162 FKEAVFMCNVLHYGGDLIVHINHGDIIRIPFPVQLFMPD--VNRLLVPDPFNTTHRSIG 219
DB 147 FKGLASLEQLYLFNQIET--LDPDSFQHLPKLE-RLFLHNNRIITHLVPGTEN-HLESKM 202
QY 220 EGFVYPTFPYNTGLCHLHDCVIAPMAVALVRNVTAVARGAAHLAFDENHEGAVLPDDI 279
DB 203 RLRLDS-----NTLHC-----DCEILWLADLLKTYAESGNAQAAACEYPRR----- 244
QY 280 TYTYFQSSSGTGTARGARRNDVNSTSKPSPSGGFERRLASIMAADTALHAEVIFNTGIY 339
DB 245 -----IQGRSVATITPEELNCERPRITSEPO-----DADVTSGNTVY 281
QY 340 EETPTDIKEWPMFIGMEG-----TLPLRLNAL-----GSYTRAVAGVIG 377
DB 282 FTCEAENKPKPEIILWRNNNELSMKTDRLNLLDDGTLMQNTQETDQGIYQCMARKVAG 341
QY 378 AMVFSNSALYITEVEDSGMTEAKDGGCPSPFRFYQFAGPHLAANPOTDR-----DGHVL 433
DB 342 -----EVKTQEVTLRYFGSP-----ARPTFVIQPNTEVLVGSVTL 378
QY 434 SSQSTG-----SSNTFSDVYALICGFGAPLLARLLFYLRCDAGFTGGHGA 483

RESULT 35
US-10-276-774-1957
; Sequence 1957, Application US/10276774
; Publication No. US20040053245A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc.
; APPLICANT: Tang, Y. Tom et al
; TITLE OF INVENTION: No. US20040053245A1el Nucleic Acids and Polypeptides
; FILE REFERENCE: 21272-030
; CURRENT APPLICATION NUMBER: US/10/276,774
; CURRENT FILING DATE: 2002-11-18
; PRIOR APPLICATION NUMBER: 09/560,875
; PRIOR FILING DATE: 2000-04-27
; PRIOR APPLICATION NUMBER: 09/496,914
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 2700
; SOFTWARE: Custom
; SEQ ID NO 1957
; LENGTH: 1498
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-276-774-1957

Query Match
Best Local Similarity 1.8%; Score 114.5; DB 12; Length 1498;
Matches 204; Conservative 118; Mismatches 441; Indels 341; Gaps 47;

QY 162 FKEAVFMCNVLHYGGDLIVHINHGDIIRIPFPVQLFMPD--VNRLLVPDPFNTTHRSIG 219
DB 147 FKGLASLEQLYLFNQIET--LDPDSFQHLPKLE-RLFLHNNRIITHLVPGTEN-HLESKM 202
QY 220 EGFVYPTFPYNTGLCHLHDCVIAPMAVALVRNVTAVARGAAHLAFDENHEGAVLPDDI 279
DB 203 RLRLDS-----NTLHC-----DCEILWLADLLKTYAESGNAQAAACEYPRR----- 244
QY 280 TYTYFQSSSGTGTARGARRNDVNSTSKPSPSGGFERRLASIMAADTALHAEVIFNTGIY 339
DB 245 -----IQGRSVATITPEELNCERPRITSEPO-----DADVTSGNTVY 281
QY 340 EETPTDIKEWPMFIGMEG-----TLPLRLNAL-----GSYTRAVAGVIG 377
DB 282 FTCEAENKPKPEIILWRNNNELSMKTDRLNLLDDGTLMQNTQETDQGIYQCMARKVAG 341
QY 378 AMVFSNSALYITEVEDSGMTEAKDGGCPSPFRFYQFAGPHLAANPOTDR-----DGHVL 433
DB 342 -----EVKTQEVTLRYFGSP-----ARPTFVIQPNTEVLVGSVTL 378
QY 434 SSQSTG-----SSNTFSDVYALICGFGAPLLARLLFYLRCDAGFTGGHGA 483
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Db 379 ECSATGHPPPRISWTRGDRTPLPVDRVNIITPSGG-----LYIQ-----NVVQDSGEY 427
QY 484 LKVTGTGTFSEIPCSLCEKHTRPVCAHTTVHRLQRMPRFGQATQPIGVFG-TMNSQYS 542
Db 428 ACSATNNIDS-----VHATAFIIVQALPOFTVTPQDRVVIEGTVDQ-- 470
QY 543 CDCPLGNAYPILRLKPGDOTEAAKATMQDTYRATLERLFIQERILDRGA-PCSSSEG 601
Db 471 -CEAKGNPPFVIAMTKGGSLSV-----DRRLVLSSGTLRISGVALHDQOYEQAVN 523
QY 602 L--SSVIVDHTFERRILDLARIECTTQFMKVLVETRDYKIREGLSEATHSMALTDFP 659
Db 524 IIGSKVVAHLTVQPRVTFVFAIPSDTT-----VEVGANVQLPCSSQGEPEPAITWKN 577
QY 660 YSGAFCPITNFLVKRTHLAVVQDLA---LSQCHCVYGOQVEGRNF--RNQFQVLRRRP 714
Db 578 DGQVVTESGKFHISPEGLTINDVGPADAGRECV-----ARNITIGSASVSMVLSNVN 630
QY 715 VDLFNGG--FIST-----RSITVT---LSEGPVSAPNPTLG-----QDA 748
Db 631 PDVSRNGDPFVATSIVEAIATVRAINSTRTHLFDSPRSPNDLLALFRYPRDPYVVEQA 690
QY 749 PAGRTFDCDLARVSVEIRDIVK-----NRVFSGNCTNLSEAAAR 791
Db 691 RAGEIFERTLIQEHVQHGLMVDLNGTSYHNDLVSPQVNLNIANSCT-----AHR 745
QY 792 LVGLASAYQOEKRV-----DMLHGALGFLKQFHGLL-----PPRGMPN----- 832
Db 746 VNNSDCMCFHQKVRTHDGTCNNLQHPMWGASLTAFERLLKSVYENGFTPRGINPHRLYN 805
QY 833 -----SKSPNPFOWFTLLQRNOMPADKLTHEEITIAAVK--RFTEE 872
Db 806 GHALPMPRLVSTTLIGTETVTPDEQFTHMLMQWQF-----LDHDLSTTVVALSQARFSDG 861
QY 873 YAAINFNLPTCTI-----GELAQFYMANLILKYCDHSOYLINTLTSITGA 919
Db 862 QHCSNVCSNDPPCFPSVMIPPNDSRARGARCMFFVR-----SPVCGSGMTSLMNS 913
QY 920 RRPDPSSVLHWIRKDYTSADIETQAKALLEKTENLPELWTTAFTSTH--LVRAAMNOR 977
Db 914 VYPREQINQL-----TSYIDASNVYCGSTEHEARSIRDL-----ASHRGLRQGIQVR 960
QY 978 PMVVLGTSISKYHGAAGNRRVFOAGNWSGLNGKVCPLFTFDRTRRFIIACPR-----GG 1033
Db 961 -----SGKPLLPFAIGPPT-----CMRDENESP 984
QY 1034 FICPVTGSSGNRETTLSQ-----VRGIIVSGGANVQL-----AIYATVVRAGARQ 1082
Db 985 IPCFLAGDHRANEGLGLTSMHTLWFREHNRIATELLKLNPHWDGDTIYYETRKIVGAEIQ 1044
QY 1053 HMAFDDMLSLTDDFLARDLEELH 1106
Db 1045 HITQHNLPKILGEVGMETLGEYH 1068

Search completed: June 3, 2004, 07:14:06
Job time : 562 secs